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# THE TWENTY-FOURTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

PART I
REPORT OF THE NATIONAL COMMITTEE
ON READING

THIS TEARHOOK WILL BE DISCUSSED AT THE CINCINNATI MEETING OF THE SOCIETY SATURDAY, FEBRUARY 21, 1925, 8 P.M.

> PUBLIC SC.100L PUBLISHING COMPANY BLOOMINGTON, ILLINOIS 1925

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SECRETARY OF THE SOCIETY

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# THE TWENTY-FOURTH YEARBOOK

OF THE

# NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

#### PART I

#### REPORT OF THE NATIONAL COMMITTEE ON READING

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Secretary

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#### EDITOR'S PREFACE

In accepting for one of its Yearbooks a report prepared by a group of investigators not primarily organized from its own initiative, though comprised almost entirely of its own active members, this Society is but continuing a precedent that has been followed at various times during the past, and with advantage both to the investigators and to itself. Nor is this the first time that the Yearbooks have dealt with reading. On the contrary, it will be recalled that the Twentieth Yearbook, Part II, published in 1921, was devoted to the "Report of the Society's Committee on Silent Reading," and also that numerous helpful discussions concerning reading appeared in the Nineteenth Yearbook, Part I and the Twentieth Yearbook, Part I, on "New Materials of Instruction," and at various points in the several Yearbooks (Fourteenth, Part I, Sixteenth, Part I; Seventeenth, Part I; and Eighteenth, Part II) that dealt with "Minimal Essentials in Elementary-School Subects" and "Economy of Time in Learning" Despite these many references to subject, this present Yearbook will not come amiss, for reading is so obviously the key subject of the elementary grades and has, as this Yearbook rightly stresses, so many ramifications and contacts with the other school subjects and with important attitudes and habits of mental work that we cannot have too much light thrown upon its aims and methods

Members of the Society will appreciate alike the authoritativeness of the present volume and the care with which its compilers have kept clearly differentiated what is known, what is merely the best opinion, and what is yet unknown and in urgent need of investigation.

G. M. W.

#### INTRODUCTION

Purpose and appointment of the Reading Committee. At a conference of representative school men held in December, 1922, the fact was emphasized that there is great waste of time and effort in teaching many school subjects. The opinion was unanimous that progress in improving instruction would be far more rapid if school officers and teachers were provided with carefully prepared suggestions concerning debatable issues in particular fields. The members of the conference voted, therefore, to recommend to Commissioner Tigert that a committee be appointed to make a study of important problems in one subject, namely, reading, and to prepare recommendations based on experimental evidence as far as possible, and on expert opinion where such evidence is lacking. A committee of seven was officially appointed in January, 1923. Another member was added to the committee later.

Brief resume of activities and problems of the Committee first meeting of the committee was held in Cleveland, February 28, 1923, when a general plan of procedure was adopted. The first steps taken were to secure from teachers and supervisors a list of reading problems that presented serious difficulty. The reports received from the teachers of more than fifty cities contained a wealth of invaluable information. With a summary of this material at hand the committee met in Chicago in May for a conference concerning the nature and scope of the proposed report. During the course of the conference two facts became evident; first, that suggestions were needed concerning practically every phase of reading instruction. and second, that most of the recommendations which should be made could be organized to advantage about eight or ten problems of major importance. The plan was adopted, therefore, of assigning one or more problems and their related issues to each member of the committee, who was authorized to secure the assistance of experts in studying them and in preparing a report. It was also agreed that these reports should include systematic discussions of the problems in each field, rather than a series of brief recommendations concerning specific issues. The committee hoped that such discussions would not only provide answers to specific questions, but would, in addition, prove a valuable source of information for use in reorganizing courses of study and in improving classroom teaching.

During the summer and autumn of 1923, it was found that the problem assigned required more time for study than members of the committee could spare from their regular professional duties. Furthermore, no funds were available to defray expenses for necessary conferences. These facts are referred to here because the Reading Committee is convinced that adequate provision of both time and funds should be made in the future for committees which are to

undertake pieces of work of large importance. Fortunately, in the present case timely steps were taken by various agencies which provided the committee with much needed assistance.

The first step was the adoption by several national organizations of a resolution supporting the recommendation that governing boards be asked to relieve members of committees engaged in enterprises of major importance from a part or all of their regular duties for a period of time on pay. A copy of the resolution follows:

"At a recent meeting of a group of representative schoolmen before whom the work of the Committee on Reading appointed by Commissioner Tigert was reported, it was pointed out that the assembling and interpretation of the material which should be made available for the use of teachers and supervisors would require more time and energy than the members of the committee could give while meeting their regular professional obligations. In order that this service might be rendered to the profession, it was urged that the institutions and school systems in which the committee are employed be asked to relieve them for a period of time on pay from a part or all of their regular duties in order that they might complete the work undertaken. It was recommended as well that this policy in the cases of enterprises of major importance be sanctioned by professional organizations interested in such work by resolution in their next annual meeting. In support of the recommendation, several individuals reported action by the governing boards under which they are employed, relieving them from their duties in order that they might render important professional service, significant not only to their own group but also to the development of scientific work in education and to the efficiency of all workers in that field."

The adoption of this resolution made it possible for members of the committee to secure permission to leave their regular work for short periods of time to attend a limited number of conferences. The committee was further assisted in its work by a subsidy from the Commonwealth Fund.

As a result of the generous attitude of governing boards and of the subsidy which was granted, the Reading Committee was able to continue its work in 1924. A conference lasting for three days was held in February during the week of the Chicago meeting of the Department of Superintendence. Brief conferences were also held in Chicago and in Toledo during May and June by members of the committee who were interested in particular problems. Preliminary drafts of the report were submitted to various members of the committee during August and September for criticism and suggestions. A final meeting, lasting for seven days, was held in Chicago in October. At this time members of the committee worked intensively on sections of the report, engaged in critical discussions of the various chapters, and modified and refined their recommendations. It is needless to state that far more time could have been used to distinct advantage for these purposes.

Nature and validity of the recommendations. The committee was

requested at the time of its appointment to prepare recommendations concerning debatable issues in the field of reading, based on experimental evidence, as far as possible, and on expert opinion when evidence was lacking. It has endeavored to follow instructions and to provide valid recommendations. Each member of the committee has made a careful study of investigations relating to his problems and has referred frequently in the report to investigations which support the recommendations that are made. Each section of the report has been studied critically by individual members of the committee and constructive suggestions offered. The revised reports have been discussed deliberately by the committee as a whole and additional changes made. It was impossible to secure experimental evidence in support of each recommendation included in the report. Furthermore, there was inadequate time at the disposal of the committee to discuss all recommendations in detail. It is quite probable, therefore, that suggestions have been included which are not entirely valid and that future experimental studies may justify departure from some of the recommendations in this report. Meanwhile, practical workers in the field may be assured that the report contains the most carefully considered recommendations available at present in the field of reading

Because of the limitations of this report, the Reading Committee recommends that a committee be organized to continue studies in the field of reading. Field studies as well as laboratory studies should be encouraged. There is special need of a series of investigations in city systems to determine the most effective ways of organizing and supervising reading instruction. There is also need of a series of studies to determine methods of teaching which secure results most economically and effectively. Funds should be provided which will make it possible for a committee to carry on its work systematically. In from three to five years, a subsequent report should indicate clearly the progress which has been made in the scientific study of reading problems, the changes in instruction which are justified by such investigations, and the problems which are in most need of further study. It is only through well-organized, systematic effort extending over a period of years that instruction in reading, or in any other subject, may be definitely established on a scientific basis.

Acknowledgments. The members of the Reading Committee wish to express at this time their appreciation to those who made this report possible. They are especially indebted (a) to the group of representative schoolmen who saw the need of a report on reading and who offered valuable suggestions concerning the nature and content of the report; (b) to Commissioner Tigert, who appointed the committee, took personal interest in its work, and offered whatever assistance the Bureau of Education could provide; (c) to the Commonwealth Fund Committee for the financial help which it

gave, (d) to the Board of Directors of the National Society for the Study of Education for arranging to publish the report, and (e) to publishers who provided members of the committee with much valuable information concerning available reading materials

The members of the committee also wish to express their keen appreciation to those who contributed generously of their time and energy, either in assisting the committee as a whole, or as members of a sub-committee. In this connection, the committee is especially indebted to the following:

Wilbur L. Beauchamp, Instructor of Science, University High School, The University of Chicago

Fannic Wyche Dunn, Assistant Professor of Education, Teachers College

Anne T. Eaton, Librarian, The Lincoln School of Teachers College

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Charles S. Meek, Superintendent of Schools, Toledo, Ohio

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Maude McBroom, Supervisor, University Elementary School, State University of Iowa, Iowa City, Iowa

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Mary E. Pennell, Assistant Superintendent of Schools, Kansas City, Missouri

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W. W. Theisen, Assistant Superintendent of Schools, Milwaukee, Wisconsin

Willis L. Uhl, Associate Professor of Education, University of Wisconsin, Madison, Wisconsin.

C. W. Washburne, Superintendent of Schools, Winnetka, Illinois

Marian J. Wesley, Supervisor of Primary Grades, Haverhill, Massachusetts

The contents of this Yearbook are presented as a report of the committee as a whole. Nevertheless, full credit should be given for specific contributions to individual members of the committee. The

names of the members of the committee and the problems for which each was directly responsible follow:

Sterling A. Leonard, Assistant Professor of English. University of Wisconsin

"Classification of Reading Experiences" (in Ch. I)

"Reading in Relation to Literature"

William S. Gray, Dean of the College of Education, The University of Chicago

"Reading in School and in Social Life" (Except the "Classification of Reading Experiences")

"Essential Objectives of Instruction in Reading"

"Outline of a Reading Program for the Grades and High

Ernest Horn, Professor of Education, University of Iowa "Appropriate Materials for Instruction in Reading"

Frances Jenkins, Assistant Professor of Education, College of Educa-

tion, University of Cincinnati
"The Development of a Meaningful Vocabulary and of Independence in Word Recognition"

Estaline Wilson, Assistant Superintendent of Schools, Toledo, Ohio. "The Relation of Reading to Other School Subjects and

Activities' Laura Zirbes, Investigator in Reading, Lincoln School of Teachers College, New York City.
"Provision for Individual Differences"

"Reading Tests: Standardized and Informal"

"Diagnosis and Remedial Work"

Frank W. Ballou, Superintendent of Schools, Washington, D. C., and Rose Lees Hardy, Director of Primary Instruction, Washington, D. C.
"Ways and Means of Putting Across a Progressive Reading

Program"

The additional statement should be made that members of the committee have generously contributed material which had been prepared for publication elsewhere. The fact has been clearly recognized from the beginning that the publication of materials in this report should in no way interfere with other publication plans of members of the committee.

> FRANK W. BALLOU ROSE LEES HARDY ERNEST HORN Frances Jenkins STERLING A. LEONARD ESTALINE WILSON LAURA ZIRBES WILLIAM S. GRAY, Chairman.

#### CHAPTER 1

#### READING ACTIVITIES IN SCHOOL AND IN SOCIAL LIFE.

Point of view. The justification of any subject in the curriculum is that it enables pupils to engage effectively in desirable life activities. In keeping with this principle, instruction in reading should take account first of the reading experiences of children and adults in the home, in school, and in all social life. Information about these experiences aids in determining the kinds of reading that people do and should learn to do better. It may also reveal the reading activities that deserve and need special encouragement.

It is the purpose of this section to consider important facts concerning reading in school and in modern life, and to outline types of reading activities in which children and adults frequently engage. Such an outline reveals, in a limited way, the breadth and variety of reading activities that should be considered in planning a program of instruction.

Relation of reading to school activities. The most important change of recent years in classroom instruction is the enrichment of the course of study and of the opportunities offered to children. Instead of few textbooks relating to a limited number of topics, the progressive school to-day provides wide reading opportunities in many fields. Furthermore, the solution of most classroom problems requires the skillful use of books and sources of information. The library "is the place where the children bring the experiences, the problems, the questions, the particular facts which they have found and discuss them so that new light may be thrown upon them, particularly new light from the experiences of others."...¹

These tendencies have resulted in establishing a very close relation between reading and practically every school activity. As a special subject of instruction, it is intimately related to children's daily experiences and language activities, and should be taught in connection with them. As a means of gaining information and pleasure, it is essential in every content subject, such as history, geography, arithmetic, science, and literature. In fact, rapid progress in

<sup>&</sup>lt;sup>1</sup> John Dewey, School and Society, p. 100. Chicago: University of Chicago Press, 1900.

these subjects depends in a large degree on the ability of pupils to read independently and intelligently. It follows that good teaching must provide for the improvement and refinement of the reading attitudes, habits, and skills that are needed in all school activities involving reading.

#### SIGNIFICANT FACTS ABOUT READING IN MODREN LIFE

Intelligent reading essential One of the noteworthy developments of the last decade is a keener appreciation of the importance of intelligent reading in social life. Investigations 2 show that it is an indispensable means of "familiarizing adults with current events, with significant social issues, with community and national problems, and with American institutions, ideals, and aspirations." It is essential also in attaining vocational efficiency, in broadening one's range of general information, and in securing pleasure and profit during leisure hours. An additional value has been expressed forcibly in the following terms:

We cannot deal with men and affairs beyond our personal touch without the printed record to give us understanding of them. All cooperation begins with understanding and the sympathy which flows from understanding. Democracies with a far-flung population, greatly diversified in occupation and manner of life, must rely heavily for common appreciations upon printed records, newspapers, magazines, and books. . . . Thus teachers and schools have become necessary to that expanded power of appreciation, chiefly gained through books, which our modern democracies and world relations require.

Rapid increase in amount of reading. A second significant fact is that the amount of reading has increased rapidly during recent years. It has been shown that the number of newspapers and magazines issued has increased at least 500 percent since 1880, although the increase in population during the same period has been little more than one fifth as much. Recent estimates of the daily circulation of newspapers place the number above thirty millions. It is doubtless safe to conclude that the number of readers is far greater.

tary School Journal, 23 (December, 1922), 253-255.

<sup>&</sup>lt;sup>2</sup> William S. Gray, "Importance of intelligent silent reading," Elementary School Journal, 24 (January, 1924), 348-356; also other studies referred to in this article.

 <sup>&</sup>lt;sup>3</sup> Henry Suzzallo, Our Faith in Education, pp. 36-39. Philadelphia:
 J. B. Lippincott Co., 1924.
 <sup>4</sup> Charles H. Judd, "Relation of school expansion to reading," Elementary

Periodicals, several of which publish more than a million at each issue, are everywhere on sale. The rural delivery has developed so widely that nearly every community receives daily papers, government bulletins, and magazines. Furthermore, free public libraries containing thousands of books supply reading materials to many people in every section of the land. During the last twelve years the number of withdrawals per year in some libraries has increased 400 percent. It is evident that the use of so much printed material, if intelligently selected and interpreted, will produce a profound effect on American life in the near future. Unfortunately, much of the material read has little or no value, and much that is of real worth is read by only a few.

Inadequate reading attitudes and habits. The third fact is that a surprisingly large number of people are not interested in reading, do not read, and, in fact, cannot read effectively even simple material. The results of the army tests led to the conclusion<sup>5</sup> that "there must have been over a million of our soldiers and sailors who were not able to write a simple letter or read a newspaper with ease." This statement was followed by another of even greater significance, namely: "This deficiency was not caused by their never having learned to read. The fact is that an overwhelming majority of these soldiers had entered school, attended the primary grades where reading is taught, and had been taught to read. Yet, when as adults they were examined, they were unable to read readily such simple material as that of a daily newspaper." These facts make it clear that schools face two genuine problems, namely, to train all pupils to read effectively and to establish strong motives for, and permanent interests in, reading

Silent reading of largest social value. The fourth fact is that most reading is carried on silently. In a study of the reading habits of more than nine hundred adults representing practically every station in life, it was found "that fewer than 5 percent read aloud on other than very infrequent occasions." It is no doubt true that many adults who do not read orally could do so on occasions to distinct advantage. Even when such facts are considered, it is

<sup>&</sup>lt;sup>5</sup> May Ayres Burgess, The Measurement of Silent Reading, p. 11. New York: Russell Sage Foundation, 1921.

William S. Gray, "The importance of intelligent silent reading," Elementary School Journal, 24 (January, 1924), 348-349.

580-586.

evident that there is need of vigorous emphasis in any program of instruction on habits of intelligent silent reading.

Children and adults read for many purposes. The fifth fact is that children and adults read for a wide variety7 of purposes. For example, adults read silently to secure general information and civic enlightenment, to attain greater vocational efficiency, to extend experience, and to secure pleasure during leisure hours. They also read aloud at times to inform or entertain others or to derive pleasure for themselves. Reports<sup>8</sup> from 250 teachers show that pupils read for more than thirty different purposes in preparing assignments. For example, they read to find answers to questions, to follow directions, and to select important points and supporting details. Recent investigations b show clearly that changes in the purposes of reading and in the kinds of material read are accompanied by radical changes in the habits that are employed in reading. It follows that children should be trained to read desirable kinds of material and for a variety of useful purposes.

#### CLASSIFICATION OF READING EXPERIENCES

Two types of reading experiences. The discussion so far has emphasized the fact that reading is intimately related to all school activities, that it is indispensable in modern life, and that children and adults read for many useful purposes. It is essential, therefore, that we consider in greater detail the types of reading that should be encouraged through instruction. Unfortunately, a complete list of essential reading experiences has never been prepared. In the tentative outline that follows, an effort has been made to show the breadth and variety of reading activities in which children and adults engage, rather than to present an exhaustive list of desirable activities.

The results of the few available studies 10 of uses of reading sug-

<sup>7</sup> William S. Gray, "The importance of intelligent silent reading," Elementary School Journal, 24 (January, 1924), 348-356.

8 William S. Gray, "The relation between reading and study," National Education Association: Addresses and Proceedings, 57 (1919),

<sup>580-586.</sup>Charles H. Judd and Guy T. Buswell, Silent Reading: A Study of the Various Types, Chap. III. Supplementary Educational Monographs, No. 23. Chicago: Department of Education, University of Chicago, 1922.

10 William S. Gray, "The importance of intelligent silent reading," Elementary School Journal, 24 (January, 1924), 348-356.

Ernest Horn and Maude McBroom, "A Survey of the Course of Study in Reading," University of Iowa Extension Bulletin, No. 99 (1924).

gest that reading activities may be conveniently grouped into two types, depending more on the attitude of the reader than on the subject matter. These are work-type and recreational reading. This plan of classification has been adopted because these two types of reading are frequently confused in classrooms, and it is desirable to distinguish them for the purposes of this report. It is not intended, as indeed it seems quite impossible, to set up any full and complete separation between them. Not only may almost any selection or book be read with different purposes by different readers or by the same reader at different times, but one's attitude or purpose may change in the course of his reading. The examples which follow, therefore, are merely suggestions of materials that are often put to the purposes mentioned.

Work-type reading. The work type of reading is associated with the demands of our vocations, civic duties, and other phases of daily life. Such reading, it should be noted, is directed most often by relatively conscious and practical purposes. Thus, adults turn to professional trade, or home-making journals to discover new and important items of information. Most people read news items, advertisements, editorials, and notices purposively, to direct action, to study current problems, and, if possible, to arrive at principles of conduct in civic and personal matters.

The same sort of reading is no less common among children. Boys read and follow directions in the Scout Manual and books on radio, and girls read similarly about camperaft, cooking, and sewing. Children's magazines abound in puzzles, construction problems, and directions for various activities. Moreover, since schools are organized, in large part, for definite increase of knowledge, a great deal of the reading assigned there belongs primarily to the work type. Most lessons in history and civics, geography and other sciences, mathematics, and language require this kind of reading. Unfortunately, we have too often required such reading, rather than taught pupils how to do it effectively.

## Typical Situations Which Lead Children and Adults to Reading of the Work Typs

1. To cross streets, to find stores and houses, and to make longer journeys: reading signs, railroad folders, maps, road guides.

- 2. To understand assignments and directions in both school and life activities.
- 3. To work out complicated problems or experiments: reading Scout Manuals, materials on radio, cook-books, problems in arithmetic or other textbooks and science manuals. Adults have also to read incometax blanks and materials relating to their vocations, home-making, care of children.
- 4. To find or verify spelling, pronunciation, meaning, use of words: using the dictionary, encyclopedia and other reference books.
- 5. To gather materials for fuller understanding or for talking or writing on one's hobby, for assigned papers and discussions in school or club, and for experiments—a common type of work in schools which have gone beyond the one-text stage: using all the facilities of the reference library, and tables of contents, indexes, headings, charts, illustrations, graphs, and tables in books.
- 6. To inform or convince others: reading aloud minutes, notices, instructions, announcements, resolutions, reports (including compositions on work-type topics)—usually when only one person has the matter before him—and reading aloud passages bearing on points under discussion.
- 7. To know what is going on: reading news items, comments on events, book and drama reviews; looking over publishers' lists; tracing quotations or allusions or tracing and verifying statements to keep one up to the times. (For many people this sort of reading is recreational; for others it is distinctly work.) In school this is represented by many assignments in civics, American problems, international relations, and current history, and in the reading of bulletins in rooms or halls and communications from other classes and schools. A common illustration among adults is reading or skimming trade, manufacturing and professional journals and books or reports, to see what is new and how others in one's field are acting and thinking.
- 8. To decide how to act in new situations: reading notices, warnings, "advice to young people," business offers, advertisements. Pupils realize that they must meet new situations increasingly as they grow up. Such reading is done in school and needs to be done oftener on assignments in which pupils learn to weigh the accuracy and reliability of statements and make choice, or secure full information and then decide what to continue and complete.
- 9. To reach conclusions as to guiding principles, relative values or cause and effect: reading conflicting opinions as to school athletics, social behavior, politics, war, and the like; reading reports and editorials about strikes, elections, committee hearings. Here, again, good schools, by assignments like those listed in No. 7 above, are doing valuable work. This also leads to devising new problems or determining action. Such independent reading is what all self-directed and intelligent workers do in real life; we need much more of it in school.

Recreational Reading. Recreational reading, on the other hand, is associated with the wholesome enjoyment of leisure time. It is in general directed by no conscious purpose, but rather by random, healthy curiosity and the search for pleasant occupation.

Two varieties of recreational reading should be emphasized here. One of these grows out of natural and useful curiosity about actual experience, and particularly about human nature and the conditions of our lives. Such curiosity begins with the child's first interest in stories and pictures, and continues increasingly through life. We want to know about the ways of animals and about strange countries and stars and times different from our own. A parallel concern is with pictures of things and happenings the most familiar to us. Following on a quite opposite recreational track, we often seek mere enjoyment and rest through getting away from reality. Children's engrossment in fairy tales and tales of wonderland and nonsense is an example of this enjoyable kind of recreational reading. It is wholesome and harmless for all of us so long as it is not taken for reality.

### Typical Situations Which Lead Children and Adults to Reading of the Recreational Type

- 1. To relive common every-day experiences: enjoying stories of home and school and of one's own village or city, such as Little Women and Tom Sawyer for children, and Garland's stories and Whittier's verse for adults.
- 2. For fun or sheer enjoyment during leisure time: reading jokes, nonsense rhymes, Briggs' boy-cartoons for children, and familiar essays like Leacock's, Cobb's, more rarely Lamb's or Irvings's, for adults. More reading for this purpose is needed in schools.
- 3. To enjoy "sudden changes and sharp contrasts" 11—positive excitement: reading stories of adventure and accounts of travel and peril, like Robinson Crusoe, the Arabian Nights, Treasure Island, du Chaillu's hunting adventures, accounts of the Japanese disaster.
- 4. To get away from real life: reading romances and pictures of impossible idealism such as Tennyson's Sir Galahad or Longfellow's Excelsior.
- 5. To enjoy ready-made emotional reactions (via the "emotional short circuit"): reading cheap sentimental verses and lurid and soft romances like the Elsie Dinsmore series and Barbour's cheapest tales, and stories

<sup>11</sup> E. L. Thorndike. Educational Psychology, I. pp. 141-143. New York: Teachers College, Columbia University, 1918.

of stupidly romantic love. Common as this reading is, it, of course, has no rightful place in school.

- 6. To satisfy natural and valuable curiosities about human nature and motives: reading excellent character portrayals in fiction, plays and verse such as Irving's, Shakespeare's, and Dickens'.
- 7. To give pleasure to others: reading aloud, as among friends after supper, most frequently from materials like those mentioned in 1, 3, and 6 above.
- 8. To read aloud parts of plays and dramatic dialogue: for enjoyment in class or preparation for further dramatization.
- 9. To satisfy curiosity about animals, strange regions and times, and current happenings away from one's own environment: reading encyclopedias, travel and nature books and magazines, histories and miscellaneous portrayals of new experience. Here the shift to purposive reading occurs often and very satisfactorily.
- 10. To enjoy sensory imagery: the pictures and odors, the feel and sound—less frequently the music and movement of poetry and poetic prose, sometimes by reading it aloud to one's self or by genuinely sharing pleasant experiences in discussing them with sympathetic friends. This is, of course, most often combined with purposes like those above. As a separate pursuit, it is to be distrusted. Enjoyment of this sort is rarely, if ever, furthered by analytical study.

Methods of realizing the aims of desirable types of recreational reading will be discussed in later sections of this report, particularly Chapter VI. The purpose of enriching life experience through literature, assumed in this report, is best presented in Chapter XVIII, "Reading as a Leisure Occupation," of Bobbitt's The Curriculum. See also Leonard's Essential Principles of Teaching Reading and Literature.

Summary statement. The discussions of this chapter have shown that reading is intimately related to most school activities, that intelligent reading is indispensable in modern life, that the amount of reading that is done is rapidly increasing, that a surprisingly large number of adults are unable to read or are not interested in reading, that children and adults read for a wide variety of useful purposes, each of which is characterized by appropriate attitudes and habits, and that reading activities may be roughly classified into work-type and recreational reading. In view of these facts, what are the objectives of reading that should be emphasized most vigorously in elementary- and high-school instruction?

#### CHAPTER II

#### ESSENTIAL OBJECTIVES OF INSTRUCTION IN READING

Current aims necessarily broad. As reading was formerly taught, its content and methods were determined largely by three aims, namely: to master the mechanics of reading, to develop habits of good oral reading, and to stimulate keen interest in, and appreciation of, good literature. This view may have been appropriate in former decades when social organization was less complex and when education was restricted largely to 'the three R's.' During recent years, however, social needs have changed, the curriculum has been reorganized, and the content of school courses has been greatly enriched. To-day, reading is essential to intelligent participation in the activities of modern life and it is vitally related to practically all classroom activities. It follows that current aims of reading should be correspondingly broad and should prepare pupils to engage effectively in all essential school and life activities that involve reading.

Outline of major objectives. A detailed study of the desirable reading activities of children and adults of the attitudes, habits, and skills that are involved has led to the adoption of three major objectives of reading. The first two are broad, comprehensive aims that are of first importance in the life of every child and adult. The third emphasizes desirable attitudes and essential habits and skills.

#### I. RICH AND VARIED EXPERIENCE THROUGH READING

The primary purpose of reading in school is to extend the experiences of boys and girls, to stimulate their thinking powers, and to elevate their tastes. The ultimate end of instruction in reading is to enable the reader to participate intelligently in the thought life of the world and appreciatively in its recreational activities. This objective emphasizes the importance of the content of what is read and attaches new significance to it.

There are two large values of wide experience gained through reading. The first is its contribution to the broad, well-rounded

<sup>&</sup>lt;sup>1</sup> Franklin Bobbitt, Curriculum-Making in Los Angeles, Chap. VI. Supplementary Educational Monographs, No. 20. Chicago: Department of Education, University of Chicago, 1922.

development of the reader. If wisely chosen, reading materials will extend the experiences of boys and girls, enlarge and correct their fund of information, and stimulate habits of good thinking. Much of the information needed to-day by a well-informed person must be secured through the reading of interesting accounts of the world and its people. As our social life becomes more complex, the need of rich and varied experience will be increasingly large. It is important that pupils recognize sooner or later the imperative need of keeping in touch with social progress and world problems through reading.

A serious weakness of reading instruction in former decades lay in the fact that the selections used were organized primarily for use in teaching pupils to read. In the future, reading should not only accomplish this purpose well, but in addition it should broaden the horizon of the reader and stimulate his interests and thinking powers. A forceful statement of the scope and value of such reading follows. A more detailed discussion of desirable types of reading materials appears in Chapter VII.

The reading that produces the greatest educational returns to young people is the reading of books chosen for their value in revealing the great fields of science, industry, history, biography, invention, travel, exploration, manners and customs in other lands, etc. When children are brought into contact with enough and good enough books of these sorts, life-long habits of intelligent reading become fixed. Moreover, there must be reading from newspapers and magazines for recreation, for social enlightenment, and for ideas, suggestions, and information with respect to vocations and civic problems.<sup>2</sup>

Wide experience does more than aid in the interpretation of life situations; it also contributes<sup>3</sup> to the development of power to interpret effectively what is read. The fact is generally recognized that a reader of wide experience interprets what he reads far better than one of limited experience. As a rule, the associations which he makes are more numerous, vivid, and effective. If reading materials are selected with care, they supply boys and girls with wholesome attitudes and a rich fund of information which are essential in intelligent reading.

<sup>&</sup>lt;sup>2</sup> Leonard P. Ayres and Adele McKinnie, The Public Library and the Public Schools, pp. 77-78. Cleveland: Survey Committee of the Cleveland Foundation, 1916.

<sup>&</sup>lt;sup>3</sup> E. L. Thorndike, "Reading as reasoning: a study of mistakes in paragraph reading," Journal of Educational Psychology, 8 (June, 1917), 323-332.

#### II. STRONG MOTIVES FOR, AND PERMANENT INTERESTS IN, READING

A second objective of reading instruction is to develop strong motives for, and permanent interests in reading that will inspire the present and future life of the reader and provide for the wholesome use of leisure time. This includes not only permanent interests in reading in a narrow sense of the term, but in addition keen interests in life, in the world and its people, a desire to keep posted concerning current events and social problems, and the habit of reading systematically for recreation and intellectual stimulation. The ultimate measure of the vitality of the reading experiences in school is the extent to which they lead to desirable interests, standards, tastes, and habits which carry over into life outside of school, such as interest in current events, in books and selections of genuine worth, and in the wholesome use of leisure time. The accomplishment of this aim makes it necessary to acquaint pupils with the sources and values of reading materials of both the work and recreational types, and to develop standards which may be used in selecting reading materials

The importance of stimulating strong motives for reading is emphasized by the fact 4 that thousands who learned to read in school read very little, if at all, as adults. Furthermore, a surprisingly large number of people state frankly that they are not interested in reading or that they do not know where to secure materials which they might care to read. If school systems are justified in spending millions of dollars each year in teaching pupils to read, it is imperative that permanent habits of reading be established in order to secure intelligent participation in personal and social activities for which society makes such generous provision. In this connection, special attention should be given to those pupils who learn slowly, who encounter unusual difficulties, or who fail to respond to the motives that appeal to most pupils.

## III. DESIRABLE ATTITUDES AND ECONOMICAL AND EFFECTIVE HABITS AND SKILLS

An analysis of the characteristics of an effective reader shows that he follows appropriate steps in each reading situation, assumes

<sup>&</sup>lt;sup>4</sup> May Ayres Burgess, The Measurement of Silent Reading, p. 11. New York: Russell Sage Foundation, 1921.

desirable attitudes, and makes use of economical and effective habits and skills. A third aim of reading instruction, therefore, is to develop the attitudes, habits, and skills that are essential in the various types of reading activities in which children and adults should engage. Unfortunately, a complete classification of these attitudes, habits, and skills has never been made. A sufficient number have been distinguished, however, to enable teachers to recognize numerous teaching problems. They will be listed separately first under appropriate headings in order to emphasize their variety and specific characteristics. This outline will be followed by a discussion which shows that these habits and skills enter into various combinations to form the step or procedures appropriate to given reading situations.

- 1. Important habits common to most reading situations. An analysis of reading activities shows that certain habits, such as the recognition of words and the interpretation of typographical devices, are common to practically all reading activities. In the case of mature readers, such habits usually operate automatically. In the early stages of instruction and in diagnostic and remedial cases, they must be given specific attention to insure rapid progress. These habits may be classified into four groups.
- (a) The first group relates to the recognition of sentences as units of thought and to the anticipation of the sequence of ideas in different types of sentences. Mature readers should be able to recognize with ease and rapidity the meaning of statements that are more or less complex and involved. In the case of children who have acquired good language habits, sentence form and structure present few or no difficulties in reading. To non-English speaking children and to those whose homes provide few or no educational advantages, language difficulties present serious problems. Even brighter children have difficulties in interpreting such language forms as the double negative and the conditional clause
- (b) The second group of habits relates to the recognition of words and groups of words and has been distinguished by Buswell<sup>5</sup> for both oral and silent reading as follows:

Accurate recognition.

<sup>&</sup>lt;sup>5</sup> Guy T. Buswell, Fundamental Reading Habits: A Study of Their Development, Chap. II. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

Rapid recognition.

A wide span of recognition.

Regular progress of perception along the lines.

Accurate return sweeps from the end of one line to the beginning of the next.

A characteristic difference between rapid and slow silent reading is the rapidity with which meanings are recognized and assimilated. A slow reader recognizes a relatively small unit of a line at each fixation and proceeds slowly and often irregularly from left to right. A rapid reader, on the other hand, recognizes a large unit at each fixation and progresses regularly and rapidly from left to right along the lines. In skimming, only parts of a passage are recognized, the units to which attention is directed being consciously or unconsciously selected by the reader according to his purpose. The additional fact should be recognized that the speed of both slow and rapid readers varies materially with the purpose of reading.

In oral reading, both meanings and pronunciations must be recognized. This may require a study of the context, the phonetic analysis of monosyllabic words, and the analysis of polysyllabic words for meaning or pronunciation, or both. Oral reading also includes habits of accurate enunciation and pronunciation. In silent reading, the recognition of the pronunciation of words is usually not necessary. If, however, the reader wishes to use orally the words which appear in the passages read, effective use must be made of habits of word recognition and pronunciation. There is danger that teachers who are interested primarily in teaching pupils to read silently may fail to develop sufficient accuracy and independence in word recognition. There is even greater danger that teachers interested primarily in oral reading will overemphasize word recognition and pronunciation.

- (c) A third group of habits common to most reading situations relates to the recognition and interpretation of typographical devices, such as punctuation, paragraphing, indentation, italics, marginal or paragraph headings, and references to footnotes or the appendix. Pupils must acquire, sooner or later, the habit of recognizing these cues to meaning and must learn to interpret them quickly and accurately.
  - (d) A fourth group of habits which should be established early

relates to such matters as holding the book correctly at the right distance from the eyes, securing proper light, and retaining a good sitting or standing position while reading.

2. Habits of intelligent interpretation. The intelligent interpretation of what is read is a problem of first importance and must be emphasized vigorously in every grade. It includes a clear grasp of the meaning of passages, an understanding of the thoughts, sentiments, and ideals expressed, and the arousal of appropriate emotional attitudes. In other words, it is a form of clear, vigorous thinking, involving the formation of numerous valuable associations. It presupposes keen interest in what is read and a strong impelling motive. In simpler types of reading, it includes also the following attitudes and habits:

Concentrating attention on the content.

Associating meanings with symbols.

Anticipating the sequence of ideas.

Associating ideas together accurately.

Recalling related experiences.

Recognizing the important elements of meaning.

Deriving meanings from the context and from pictures.

In more complex forms of interpretation, various mental processes are involved. Some of these are not essential to interpretation in a narrow sense of the term, but are required when reading for specific purposes. An outline of these important habits or processes follows:

Analyzing or selecting meanings; for example,

to select important points and supporting details

to find answers to questions

to find materials relating to a given problem

to determine the essential conditions of a problem

Associating and organizing meanings; for example,

to grasp the author's organization

to associate what is read with previous experience

to prepare an organization of what has been read

Evaluating meanings; for example,

to appraise the value or significance of statements

to compare facts read with items of information from other sources

to weigh evidence presented

to interpret critically

Retaining meanings; for example, to reproduce to others

to use in various specific ways.

One of the requirements of good interpretation is the recognition of the purpose of reading and the use of appropriate habits. It is essential, therefore, that instruction provide training in reading numerous types of material for various purposes until appropriate habits and reading procedures have been fully established.

3. Effective oral interpretation of selections to others. Studies of the uses made of reading in school and in modern social life show that there are many valuable uses of oral reading in the classroom, at home, and in public. It follows that pupils should be taught to read to others effectively. In making this recommendation, however, the committee recognizes the fact that oral reading is far less important than intelligent silent reading and should require much less time and energy than has been given to it in the past.

Effective oral reading presupposes a mastery of the fundamental habits described in 1, above, including accurate pronunciation and clear enunciation, and of the habits of intelligent interpretation described in 2. It also includes the following important attitudes, habits, and skills:

A definite motive for reading.

A sympathetic regard for the listener.

A clear understanding of the meaning and purpose of a selection.

A sense of the importance of the message.

Clear oral presentation of thought relationship.

Adjustments to, and the expression of changes in, character and mood presented in the subject matter.

Vocal adjustments to the rhythm of poetry.

Appropriate gesture and facial expression, subordinated to the thought of the selection.

Controlled bodily movements and breathing.

Keeping the entire reading situation clearly in mind and making necessary adjustments from time to time.

Confidence in one's own ability.

4. Skillful use of books, libraries, and sources of information. Wide reading, both of the recreational and the work types, can be pursued to advantage only when readers use books and sources of information skillfully and intelligently. It follows, therefore, that one of the important obligations of teachers of reading is to develop

skill in the use of printed materials and sources of information. Satisfactory results presuppose keen interest on the part of pupils in keeping materials clean and orderly and in learning to use books and sources of information effectively. Important habits and skills which should be developed are listed in the following outline:

(1) In the use of books and sources of information

Keeping books clean and neat.

Opening books and turning pages carefully.

Skillful use of preface, index, table of contents, chapter and paragraph headings, keys, tables, graphs, glossary, appendix.

Effective use of dictionary

in finding words.

in deriving pronunciations,

in selecting appropriate meanings.

Effective uses of sources of information in finding references quickly.

(2) In the use of libraries

Effective use of library privileges and aids, including card files, bound volumes of periodicals, reader's guides, bibliographies.

Technique of withdrawing and returning books.

In addition, it is necessary to train pupils to ascertain the reliability of printed material and to prejudge and select books intelligently for specific purposes. Some of the points which must be considered in this connection are the date of publication, the position or standing of the author, the nature of the evidence presented, and the character of the author's interpretations.

Appropriate procedures in given reading activities. The fact was emphasized earlier that attitudes, habits, and skills enter into various combinations to form the steps or procedures appropriate in given reading activities. For example, when one reads a selection silently to secure a clear grasp of its meaning, he directs attention to the content, he associates meanings with symbols, he associates the elements of meaning into related wholes, he recognizes the relative importance of ideas, he studies the context or other sources for meanings which are not familiar, he analyzes the content of what he reads, he weighs values and makes judgments, and he fixes in mind those meanings which are of value to him. On the other hand, when one reads aloud to others a passage with which he is

quite familiar, he considers the importance of the message to his audience, the specific results which should be secured through reading, and the steps by which those results can be produced most effectively. When reading aloud, he recognizes groups of words accurately and pronounces them clearly and distinctly, he gives a clear oral presentation of the thought, he adjusts his manner of presentation to changes in the character and mood of the selections, he controls his facial expression, bodily movements, and breathing in order to secure the most desired results, and he observes his audience carefully from time to time to determine needed adjustments.

These examples make it clear that different attitudes, habits, and skills are used in different reading situations. It follows that one of the major responsibilities of the school is to train pupils to adopt appropriate procedures in given reading activities. The fact should be remembered, however, that the procedures adopted and the specific attitudes, habits, and skills, that are involved are intimately related and must be developed simultaneously. When preparing to present a unit of work, teachers should make a careful study of the purpose of the reading exercise, the steps by which it can be accomplished most effectively, and the essential attitudes, habits, and skills that are involved. It is also necessary to determine which of the essential steps or habits have been thoroughly mastered, which will need additional drill, and which are new and will need special emphasis. Furthermore, individual differences must be considered and provision made for children at different levels of advancement. In order to describe the problems involved more concretely, an analysis of one reading situation for a sixth-grade class is included. Procedures appropriate for other situations are suggested in Chapter V.

Situation: Reading of a series of references to prepare a report on child life in Holland.

#### Prerequisites:

- 1. Keen interest in the problem.
- 2. A sufficient mastery of fundamental habits to engage in independent reading of available materials.
- 3. Ability to interpret the materials assigned and to make use of the information presented.

<sup>&</sup>lt;sup>6</sup> For a similar analysis, see H. C. Hill and R. L. Lyman, *Reading and Living*, Book II, pp. 245-246. New York: Charles Scribner's Sons, 1924.

- 4. Power of sustaining and directing effort until the problem has been solved.
  - 5. Ability to use index and make notes.

Initial step: A clear recognition of the problem to insure an accurate understanding of the purpose of the reading activity undertaken.

Second step: Selecting materials.

- 1. Collect all available sources in order that nothing pertinent to the problem may be disregarded.
- 2. Ascertain from the table of contents or index the amount and location of relevant materials.
  - 3. Scan the material rapidly to determine its usefulness.
- 4. Select the material to be studied by considering the problem, its importance, and the amount of time that may be devoted to it.
- 5. Classify the selected references into two or more types: (a) those of a general nature to be read rapidly for background purposes; and (b) those making specific contributions, and therefore requiring more careful reading.

Third step: Reading and assimilating.

- 1. Read rapidly the background references to secure a basis for understanding the more specific references.
  - 2. Read more carefully the references making specific contributions.
- 3. Select the items of information which bear directly on child life in Holland and which are worth presenting to the class.
  - 4. Make brief notes or references concerning important points.
- 5. Go over the important items of information in order to develop a comprehensive picture of the essential facts.

Fourth step: Organizing the material.

- 1. Analyze the information obtained and classify it under appropriate headings. In this connection make free use of the notes and references made while reading.
- 2. Refine this analysis until the major facts and the important details are summarized in an effective outline. Frequent rereadings of references may be necessary.
- 3. Critically scrutinize this outline, making such revisions as seem desirable.

Fifth step: Fixing the outline in mind and preparing the oral report.

- 1. Go over the organization until its essential points are clearly in mind, if it is to be presented without the use of notes.
- 2. Review the facts relating to each important item until they can be presented clearly and coherently.
- 3. Practice giving the report as a whole until it can be given effectively with or without notes as the occasion demands.

Variations in procedure. The steps which have been outlined apply to a given situation. They should be modified to meet different con-

ditions. For example, the problem should be limited to brief topics in the lower grades; the materials assigned should be very simple; definite help should be given to the pupils in finding references; fewer notes should be required; and less well-organized and complete reports should be expected; more individual initiative and responsibility should be expected; the selection of materials may require the wider use of books, card indexes, and readers' guides; pupils should work more rapidly and interpret more critically; their organizations should be more appropriate for the purpose at hand; and their presentations longer and more effective.

Furthermore, provision should be made for individual differences among pupils within a group. The materials assigned to brighter pupils may be richer in content and more difficult; more initiative and independence should be expected; and more complete, more detailed, and better organized reports may be required. For pupils who learn slowly, the problem should be simplified; the materials assigned should be easier; more encouragement and guidance is usually necessary, and less complete and well-organized reports should be required. It is imperative that the teacher make careful studies of the accomplishment and needs of her pupils and provide training in each important reading situation which will lead to maximal progress on the part of all.

#### CHAPTER III

#### A MODERN PROGRAM OF READING INSTRUCTION FOR THE GRADES AND THE HIGH SCHOOL

Purpose of Chapter. The first chapter of this report presented important facts concerning reading in modern social life and described various types of reading activities in which children do, and should, engage. The second chapter directed attention to three major objectives of reading instruction and outlined desirable procedures in specific reading situations. This chapter outlines a modern reading program which, it is believed, will provide rich experience through reading, inculcate strong motives for reading, and develop essential reading attitudes, habits, and skills. The major divisions of such a program, based on periods of development in reading ability, will be distinguished first. More detailed information will then be presented concerning the purpose, organization of instruction, and desirable levels of achievement for various school grades.

It is not intended that the reading program recommended in this report should be followed rigidly by any group of teachers. The fact is clearly recognized, on the other hand, that each school system should organize courses of study adapted to its specific needs. It is hoped, however, that the recommendations which are made may suggest important problems which should be considered by school officers and teachers in their efforts to reorganize and improve reading instruction.

#### A. IMPORTANT DIVISIONS OF A READING PROGRAM

Characteristics of pupil progress. A careful study of the progress of children in reading shows that they pass through different stages of development in acquiring mature habits. For example, Buswell¹ found that the span of recognition increases rapidly in the case of most pupils during the first four school years. Similar periods favorable to rapid growth have been found for other phases of reading. Good instruction recognizes the importance of these growth periods and provides appropriate training at each stage of development.

<sup>&</sup>lt;sup>1</sup> Guy T. Buswell, Fundamental Reading Habits: A Study of Their Development, p. 28. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

Growth periods in specific phases of reading. The studies of growth in the fundamental reading habits that have been published are based on the results of instruction as it is now given in representative schools. It follows that conclusions based on such records must be tentative and subject to revision from time to time. Furthermore, accurate records are available concerning growth periods for only a few of many important phases of reading. Nevertheless, there is abundant evidence that the summary statements which follow merit careful consideration in planning a valid reading program.

Intelligent interpretation of what is read. Ability to interpret simple passages accurately increases rapidly in the lower grades and may reach a very high level of efficiency by the end of the third grade.<sup>2</sup> It is very important that provision be made for cultivating from the beginning the attitude of looking for meanings in all reading experiences.

Speed of interpreting simple passages increases rapidly and somewhat uniformly throughout the first six grades, and not infrequently in the higher grades, as shown by the standard scores for the Burgess Scale for Measuring Silent Reading Ability. Special attention may be given to this phase of reading throughout the elementary-school grades.

Ability to interpret passages of increasing difficulty develops with steady and even progress throughout the grades and the high school, as shown by the standard scores for the Monroe Silent Reading Tests and the Thorndike-McCall Tests. Similar statements<sup>3</sup> may be made concerning the development of interpretation as measured by answers to questions and by reproductions. It follows that problems relating to the interpretation of passages of increasing difficulty and to interpretation when reading for specific purposes are of large importance in every grade above the first.

Speed of silent reading. Speed of reading increases rapidly throughout the first four grades and continues to increase steadily

<sup>&</sup>lt;sup>2</sup> William S. Gray, "The use of tests in improving instruction," Elementary School Journal, 19 (October, 1918), p. 127.

<sup>&</sup>lt;sup>3</sup> William S. Gray, Studies of Elementary-School Reading through Standardized Tests, p. 146. Supplementary Educational Monographs, Vol. I, No. 1. Chicago: Department of Education, University of Chicago, 1917.

but less rapidly during the next four. The progress made in some schools indicates that pupils may attain a relatively high speed of reading as early as the fifth or sixth grade. The fact should be emphasized in this connection that effective habits of interpretation are of first importance and must be maintained as speed increases.

The fundamental habits involved in speed of silent reading, such as the accurate and rapid recognition of words and groups of words, increase rapidly during the first four graues.<sup>5</sup> There is normally very little development in the span of recognition after the fourth grade. The rate of recognition continues to increase during the fifth and sixth grades. There is some improvement in the rhythmic progress of the eyes along the lines as late as the first year of the high school.

Reasonable speed in silent reading may be cultivated from the beginning. Special emphasis on speed of silent reading is appropriate as soon as pupils have established good habits of interpretation and can read simple material with ease and accuracy. The time at which this stage of development is reached varies from the second grade to the fourth in different schools and with different groups of children. Excessive emphasis on oral reading and failure to provide incentives to reasonable speed in silent reading during the elementary grades may result in the permanent establishment of habits of slow reading. Investigations show, however, that the speed of reading may be increased in the upper grades.

Fluent accurate oral reading. Progress in the rate and accuracy of oral reading is very rapid in the primary grades and gradual, but far less rapid, in the upper grades. By the end of the third grade, good readers have acquired four fifths of the average ability

<sup>&</sup>lt;sup>4</sup> William S. Gray, Studies of Elementary-School Reading through Standardized Tests, p. 145. Supplementary Educational Monographs, Vol. I, No. 1. Chicago: Department of Education, University of Chicago, 1917.

<sup>&</sup>lt;sup>5</sup> Guy T. Buswell, Fundamental Reading Habits: A Study of Their Development, Chap. II. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

<sup>&</sup>lt;sup>6</sup>J. A. O'Brien, Silent Reading, Chap. VIII. New York: Macmillan Co., 1921.

<sup>&</sup>lt;sup>7</sup> William S. Gray, Studies of Elementary-School Reading through Standardized Tests, p. 143. Supplementary Educational Monographs, Vol. I, No. 1. Chicago: Department of Education, University of Chicago, 1917.

of college students, as measured by the Standardized Oral Reading Paragraphs. The explanation for this noteworthy accomplishment lies in the fact that there is a very rapid progress during the first four grades in the fundamental habits involved in oral reading, such as accurate and rapid recognition, a wide span of recognition, rhythmical progress of the eyes along the lines, and a wide eye-voice span. Some progress occurs above the fourth grade in each of these elements.

These facts indicate that rapid progress in fluent, accurate oral reading is appropriate in the first three grades. Instruction should also be provided in more advanced grades for pupils who have not made satisfactory progress or who encounter unusual difficulties. in the case of certain retarded pupils who are easily embarrassed or who encounter serious language difficulties. little or no oral reading should be required.

No reference has been made here to growth in the artistic or expressive phases of oral reading. This omission is due solely to the fact that records of growth periods are not available. The social values of interpretative oral reading have been considered, however, in organizing the program of instruction which follows.

Important divisions of a reading program. Records of the normal progress of children in fundamental reading habits and studies of their interests, accomplishments, and needs in other phases of reading justify the organization of a reading program into five important periods or divisions. These periods will be distinguished briefly at this point. A detailed statement of the types of progress appropriate during each period, the purposes and organization of instruction, and desirable forms of achievement will be presented in later sections.

- 1. Period of preparation for reading. This period includes the pre-school age, the kindergarten, and frequently the early part of the first grade. Its primary purpose is to provide the training and experience which prepare pupils for instruction in reading.
- 2. The initial period of reading instruction. The most important purposes of this period are to introduce pupils to reading as a

<sup>&</sup>lt;sup>8</sup> Guy T. Buswell, Fundamental Reading Habits: A Study of Their Development, Chap. II. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

thought-getting process and to develop ability to read independently and intelligently very simple passages such as are found in the first readers in common use.

- 3. The period of rapid progress in fundamental attitudes, habits, and skills. The distinguishing characteristic of this period is rapid development of the attitudes, habits, and skills on which intelligent interpretation, fluent, accurate oral reading, and rapid silent reading depend. Appropriate instruction is provided in the second and third grades, and frequently in the fourth grade.
- 4. The period of wide reading to extend and enrich experience and to cultivate important reading attitudes, habits, and tastes. The essential purposes of this period are to extend the experiences of pupils, to quicken their thinking powers, to cultivate a wide variety of interests and tastes in reading, to develop speed in silent reading, and to lay the foundation for study habits. Instruction should also be provided to improve oral reading after habits of silent reading have been well established. This period usually includes the fourth, fifth, and sixth grades.
- 5. The period of refinement of specific reading attitudes, habits, and tastes. During this period, reading and study habits are refined in each content subject as well as in the literature period. Wholesome interests in reading, the habit of reading current events and books and magazines of real worth, the sources of different types of reading materials, and standards of selection are emphasized. Appropriate instruction is provided in the junior and senior high school grades.

Three important cautions. Three significant cautions should be offered concerning any use that is made of suggested divisions into which a reading program may be organized. The first is that only the most important characteristics of each period have been described. Phases of instruction which were emphasized in the statements concerning one period and omitted in the statements concerning other periods should receive more or less emphasis in each period. All phases of instruction which should be emphasized in each period will be discussed in later sections. The second caution is that the pupils of a given grade or class probably belong to two or even three different stages of progress and therefore have a great variety of needs. The third is that a given pupil may be at one stage

of progress in some phases of reading and at different stages of progress in other phases. For example, a third-grade pupil may read very fluently, but may fail to interpret simple selections accurately. Therefore, the suggested division should not be used as a basis for rigid classification. They should serve, on the other hand, as aids to teachers in recognizing and defining the larger problems of teaching.

# B. EXPERIENCE AND TRAINING WHICH PREPARE PUPILS FOR READING Kindergarten and Early Part of First Grade

Purpose. The purpose of this section is to describe the kinds of experience and training which prepare pupils for reading and to discuss briefly methods and materials which can be used in providing the preliminary training that is needed. The major part of this instruction should be given in a kindergarten which provides a rich and varied course of study. It will be necessary, however, for many first-grade teachers to provide similar types of training for pupils entering that grade who are not prepared for reading. In a large majority of such cases the instruction needed is very similar to that outlined in this chapter for kindergarten children.

Importance of training which prepares for reading. The child who becomes interested in reading at any age does so because of previous experiences in the home or at school. For example, he may have looked at the pictures in attractive books provided for him. His parents or teachers may have read or told stories to him from these books. They may have encouraged him to find out stories for himself by studying the pictures that illustrate them. He may have discussed these stories with his playmates, thereby gaining facility in the use of ideas, a relatively wide vocabulary, and habits of good expression. In these ways, as well as through experiences which do not include books, parents and teachers stimulate interest in reading and provide for the development of habits which are essential to rapid progress. On the other hand, many children who do not have such advantages, and some who do, spend all their time in whatever way fancy directs. Consequently, they are not attracted to reading as a form of activity. When these children enter the first grade, their preparation for, and attitude toward, reading differ widely from those of children whose activities have been carefully directed.

Prerequisites to reading. Six kinds of experience and training, essential to rapid progress in reading, may be described briefly in terms of the contributions which they make to child development.

- 1. Wide experience, provided in harmony with the interests of children and preparing them to understand the stories and activities about which they will read.
- 2. Reasonable facility in the use of ideas; that is, ability to make use of past experience and information in conversation, in solving simple problems, and in thinking clearly about the content of what they read.
- 3. Sufficient command of simple English sentences to enable pupils to speak with ease and freedom. This in turn aids them in anticipating the meaning of passages and in reading fluently.
- 4. A relatively wide speaking vocabulary which enables them to recognize quickly the meaning of words and groups of words.
- 5. Accuracy in enunciation and pronunciation which insures right habits in the first reading experiences and eliminates the need of corrective exercises later.
- 6. A genuine desire to read, which aids in the interpretation of passages and which supplies motives that carry pupils through many difficult periods.

Conscious attention at home and in the kindergarten to the six types of training which have been enumerated promotes growth that makes reading a natural and desirable activity in the first grade. The omission of such training may result in the postponement of the time when pupils are adequately prepared to learn to read. With rare exceptions, formal instruction in reading should be postponed until satisfactory progress has been made along the lines which have been described.

Methods of providing essential training and experience will now be considered.

Providing wide experience. Kindergarten and primary teachers should provide a wealth of interesting, vivid experiences about the home, the community, animals, flowers, trees, and the common relations of group and community life. Various group activities should be organized, such as gardening, caring for pets, building bird houses and constructing playhouses. Appropriate activities are detailed in Chapter VII. The pupils should be encouraged to discuss

such experiences freely and to add rapidly to their stock of ideas. The larger the number of interesting experiences which they encounter, the broader will be their background for the interpretation of what they read. The statement should be added that the value of these experiences depends largely on the accuracy with which they duplicate simple life situations. Numerous opportunities for extending and enriching the experiences of kindergarten pupils are described in detail in the following references:

S. C. Parker and Alice Temple, "Unified kindergarten and first-grade teaching," Elementary School Journal, 24 (September, 1923, through March, 1924) 13-27, 93-103, 173-183, 253-269, 333-347, 413-429, 493-506. Patty Smith Hill, A Conduct Curriculum for the Kindergarten and First Grade. New York: Charles Scribner's Sons, 1923. Pp. xxiv-124.

Lalla H. Pickett and Duralde Boren, Early Childhood Education. Yonkers-on-Hudson, New York; World Book Co., 1923. Pp. viii-220.

A Kindergarten-First-Grade Curriculum. Bureau of Education Bulletin No. 15, 1922. Washington: Bureau of Education. Pp. viii-66.

Simple stories, poems, and songs form a second source of valuable experience. If pupils talk about the experiences described in stories. they become familiar, not only with their content, but also with their forms of expression. Drawing or illustrating facts or events which are described also results in a clearer understanding of them. These activities prepare the way for good interpretation when children read independently along related lines in the primary grades. A list of stories appropriate for kindergarten children has been prepared by the Literature Committee of the International Kindergarten Union and may be secured from Miss May Murray, 1008 Investment Building, Washington, D. C.

Training pupils to use ideas. Well-planned construction lessons. play activities and discussions of the problems in which the children are interested provide excellent training in the use of ideas. To the extent that pupils consider carefully the problems under discussion. plan the steps which are necessary in realizing their purposes, and improve and refine their methods of work, they are developing good habits of thinking. The skillful teacher encourages pupils to discuss the problems on which they are working, their experiences at home and on the street, the care of their pets, and the stories which thev have heard. These discussions frequently begin with problems the solution of which provides opportunity to recall related experiences. to select relevant points, to weigh values, to organize ideas, and to make judgments. They often end with an assignment which leads

pupils to check the accuracy of their statements or to put their ideas into action, as in a dramatization. The interesting units of work and the thought-provoking discussions provided in kindergartens or first grades which have enriched curricula, are of great value in developing habits of good thinking. These in turn are essential to thoughtful interpretation in reading.

Training pupils in the use of English. The various activities which have been described require the frequent use of oral expression and provide excellent opportunities for establishing good habits. In addition, a special period, usually known as a conversation period, should be organized for the free exchange of ideas and for exercises which extend and refine the language habits of children. In this connection the following guiding principles should be observed:

- (1) Provide abundant opportunity for pupils to talk freely about matters in which they are keenly interested.
- (2) Secure freedom and spontaneity in speaking at all times. Avoid the restraint that results from frequent criticisms.
- (3) Provide real motives for speaking and genuine audience situations.
- (4) Encourage pupils to speak freely and naturally, at first in relatively short units, if necessary. Later aid them in presenting longer series of ideas in good sequence.
- (5) Encourage pupils to use whatever new words fit naturally into class discussions and activities.
- (6) Present good models of enunciation and pronunciation at all times.
- (7) Depend primarily on the imitation of right models in correcting and refining the speech habits of pupils.

Stimulating a desire to read. Keen interest in reading develops naturally from experiences which reveal to pupils that reading contributes to their pleasure and satisfaction. For example, teachers may read or tell interesting stories that please and entertain the children. Favorite Mother Goose pictures may be hung about the room with the appropriate rhymes attached. If one or more of the kindergarten children have learned to read a few simple sentences, they may be permitted to read them to their classmates. This in-

variably creates a desire to read on the part of those pupils who are eager to gain distinction and approval.

The use of incidental reading activities also stimulates keen interest in reading. For example, the names of the pupils appear on the lockers, tables, and chairs in many classrooms. Crayon boxes are labeled with the names of the colors which they contain. Signs appear about the building and brief directions are placed on the blackboard by the teacher. Not infrequently, brief passages are printed or hectographed in large letters and copies given to the pupils. A library table in one corner of the room provides interesting picture books which are enjoyed frequently by groups of children, under the direction of the teacher. Pupils are also encouraged to make use of these books during period: when they may select individually the activities of their choice. By the end of the kindergarten period every child of average ability should be keenly interested in learning to read and should have participated in a large number of informal reading activities.

Inadvisability of formal instruction in reading in the kindergarten. Because a great wealth of training and experience should be provided for children of kindergarten age, formal instruction in reading should not be given to most pupils before they enter the first grade. On the other hand, pupils who are of superior native capacity, who have made rapid progress in practically all kindergarten activities, and who express a strong desire to learn to read may engage in simple reading activities during the last few months of the kindergarten period. These activities should grow out of, and should be intimately related to the experiences in which the pupils are most interested.

Before formal instruction in reading is begun, vision and hearing tests should be given to all children, such as the McCallie Vision Tests and the whisper test for hearing. If defects are discovered, appropriate corrective steps should be taken at once. In this connection, it is imperative that the services of eye and ear specialists be provided. Delay in correcting defects may result in permanent disability in reading.

## C. CLASSIFICATION OF FIRST-GRADE CHILDREN

Wide differences among pupils entering the first grade. The fact has been emphasized that children who enter the first grade differ widely in training and experience. Some come from homes or kindergartens fully prepared for instruction in reading. Indeed, not a few have already made considerable progress in learning to read. On the other hand, many pupils enter the first grade who are not adequately prepared for reading. A majority of this group need training similar to that outlined for kindergarten children which will extend their experience, develop habits of good thinking, improve their use of oral English, increase their vocabularies, improve and refine their enunciation and pronunciation, and stimulate keen interest in reading. Some pupils need training along only one or two lines; others need it along several lines. In either case, appropriate instruction should be provided before formal work in reading is introduced. The amount of time which should be devoted to such preliminary training varies from a few weeks to several months, depending upon the extent of the pupils' deficiencies.

A large number of children enter the first grade unable to speak English. Too frequently they are assigned to reading classes immediately and are required to learn to recognize and pronounce words which have no meaning to them. This procedure is adopted by some schools in the hope that the children will acquire language habits through participation in reading activities. The procedure should be reversed. Pupils who are unable to speak English should receive a sufficient amount of language training before formal instruction in reading is introduced to give them command of simple English sentences, to develop an oral vocabulary more extensive than the vocabulary of the early reading lessons, and to establish habits of accuracy in pronunciation and enunciation.

Differences in capacity to learn. The problem of teaching reading to first-grade children is further complicated by the fact that they differ widely in mental age. Dickson<sup>9</sup> has shown that first-grade pupils vary in mental age from three years to ten in some school systems, and that those whose mental ages are lower than six years usually fail to do first-grade work satisfactorily. Theisen<sup>10</sup> followed the progress of first-grade children in reading and found that the

<sup>&</sup>lt;sup>9</sup> Virgil E. Dickson, Mental Tests and the Classroom Teacher, Ch. VI. Yonkers-on-Hudson, New York: World Book Co., 1923.

<sup>10</sup> W. W. Theisen, "Does intelligence tell in first-grade reading?" Elementary School Journal, 23 (March, 1923), 531.

pupils who ranked high mentally made from three to ten times the amount of progress made by pupils who ranked low in the mental tests. Studies made in Detroit<sup>11</sup> indicate clearly that pupils of superior mental capacity who are unable to speak English or who are not adequately prepared for reading overcome their handicaps much more rapidly than pupils who rank low in mental tests.

Need of classifying pupils at the beginning of the first grade. Since children who enter the first grade differ widely in capacity to learn, in experience, and in training, it follows that their preparation for reading is notably different. In order to provide appropriate instruction for them they must either be taught individually or in groups which are more or less homogeneous. Where the latter plan is followed, pupils should be classified as accurately as possible. Furthermore, the individual needs of pupils within each section should be studied carefully and appropriate training provided at frequent intervals for small groups or for individuals as the situation demands.

Method of classifying pupils. At least three types of information are desirable at the beginning of the first grade in classifying pupils. The first relates to their capacity to learn. For this purpose many schools give the Stanford Revision of the Binet-Simon Intelligence Tests. If the use of an individual test is not practicable, one of the following group intelligence tests may be used: Pressey's Primary Classification Test; Dearborn's Group Test of Intelligence, Series I; Haggerty's Intelligence Examination, Delta I; Otis Group Intelligence Scale, Primary Examination; Cole and Vincent's Group Intelligence for School Entrance: the Detroit First-Grade Intelligence, or the Pintner-Cunningham Primary Mental Test. The results of one or more such tests should be supplemented by information concerning a child's home, his parents, his nationality, the condition of his health, physical defects, emotional and volitional traits, and his social adaptability. A third type of information relates to the extent and scope of his previous training, the general range of his experience, the facility with which he uses ideas, the extent of his vocabulary, his use of oral English, the accuracy of

<sup>&</sup>lt;sup>11</sup> Eliza H. Oglesby, "A study of achievements in reading in X, Y, and Z groups." Detroit Journal of Education, 2 (April, 1922), pp. 58-63.

his enunciation and pronunciation, his attitude toward pictures, stories, and books, and his desire to learn to read.

Various plans have been followed in securing the information that is needed; (a) In some schools it is collected during the kindergarten period, recorded on individual cards and passed on to the first grade with comments and suggestions by the teachers. This plan makes possible the classification of pupils in the first grade as soon as group intelligence tests have been given. (b) In other schools individual or group mental tests are given in the kindergarten, and the pupils are classified on the basis of these scores when admitted to the first grade. Changes in their classification are made later if teachers secure evidence to justify them. The children who have not had kindergarten training are given group intelligence tests on entering school and are assigned to classes on the basis of the test scores until more detailed information can be secured. (c) In still other schools all pupils are given group intelligence tests on entering the first grade and are temporarily assigned to classes on the basis of the mental-test scores. A week or more is then devoted to oral exercises and interesting group activities in order to secure information concerning the accomplishments, needs, and characteristics of each pupil. The information secured in this way is recorded on individual cards and passed on to the teachers to whom the pupils are finally assigned.

Groups recommended for large schools. It is impossible to suggest a scheme of classification which is equally well adapted to conditions in all schools. The plan has been adopted, therefore, of distinguishing five types of pupils who present characteristic teaching problems. It will be necessary for each school to study the needs of its pupils carefully and to classify them into appropriate groups.

1. English-speaking children who are not prepared for reading may be grouped together for preliminary training similar to that recommended for kindergarten children. Group instruction should be supplemented by provision for specific training adapted to the needs of individual pupils. As soon as pupils are prepared for reading, they should be put in a section which is beginning that subject. The fact should be remembered that pupils of high native intelli-

gence overcome their deficiencies much more quickly than pupils of low intelligence.

- 2. Children who cannot speak English present special problems and should be grouped together for appropriate instruction in oral English. Provision should be made for these pupils to engage frequently in language activities and group exercises with English-speaking children in order that they may have the advantage of such contacts. Foreign-speaking children who learn rapidly may begin reading earlier than those who learn slowly.
- 8. Children who are prepared for instruction in reading should be grouped together in one or more sections and be given systematic training. If there is more than one section of such pupils, they may be grouped to advantage on the basis of their capacity to learn. Special consideration should be given to the needs of those pupils who learn slowly, in order to insure the development of right habits and reasonable progress.
- 4. Pupils who have learned to read at home or in the kindergarten and who give evidence of adequate preparation for additional training should be grouped together and provided with reading activities at an appropriate level of advancement.
- 5. Pupils who are repeating the work of the first grade should be assigned to a special group where individual attention may be given to their needs. As their difficulties are overcome, they may be transferred individually to sections that are doing work at levels which correspond to their own advancement.

Frequent transfers from one section to another necessary. The classification or grouping of first-grade children for the purpose of instruction in reading should be effected with a clear realization that pupils advance at different rates of progress and that frequent changes will be necessary. Each teacher should therefore study the progress of her pupils and recommend changes in their classification as soon as there is evidence to justify them. If for any reason desirable changes cannot be made, individual help should be provided for pupils who encounter difficulty.

Groups recommended for small schools. In schools which provide only two first-grade sections, the kinds of groups which are organized will vary with the needs of the pupils. In some schools, it may prove desirable to assign all who are prepared for reading to one section, and those who need preliminary training to the other. As the work goes forward in each section, the group instruction provided should be supplemented with ample provision for individual needs.

In rural schools and in other schools which have only one first-grade section, the pupils should be classified into small groups, if possible, and given appropriate instruction. For example, two or three pupils may begin systematic work in reading; another group may need language and vocabulary training; still another group may need constructive activities to train them in the use of ideas. If this plan cannot be followed, systematic work in reading should not begin until a majority of the pupils are fully prepared for it. Furthermore, the group instruction which is provided should be supplemented with wide provision for individual needs. It is very important that teachers of small schools make detailed studies of the accomplishments and needs of their pupils, similar to those described for large schools.

#### D. INITIAL PERIOD OF READING INSTRUCTION

General purpose and duration of initial period. The general purpose of early training in reading is to stimulate keen interest in reading activities, to cultivate a thoughtful reading attitude, and to develop reasonable speed and accuracy in reading simple passages. The time at which systematic training begins and the duration of the initial period vary with the preparation of pupils and with their capacity to learn. Experience teaches that a majority of first-grade pupils are prepared for reading at the beginning of the first grade or very early in the year, and are able to complete satisfactorily all requirements of the initial period by the end of that grade. For many pupils, however, reading should not be introduced for several weeks or months after they enter school. In such cases the type of training discussed in this section should often be continued well into the second grade.

Normal types of development during the initial period. A study of the development of children during this period reveals evidence of progress in the following phases of reading: (a) rapid progress in associating meanings with written or printed symbols; (b) the early development of a thoughtful reading attitude; (c) rapid prog-

ress in interpreting simple passages, in securing new experiences through reading, and in enlarging the meanings of familiar words; (d) the acquisition of a sight vocabulary of several hundred words and the development of independence in the recognition of simple words; (e) rapid progress in establishing fundamental habits, 12 such as speed and accuracy in recognizing words, a wide span of recognition, regular progress of perception along the lines, and accurate return sweeps of the eyes from the end of one line to the beginning of the next.

Three successive problems of teaching. In order to secure rapid progress in the development of important reading attitudes, habits, and skills, the instruction provided may be organized to advantage in terms of three successive problems of teaching. The first is to begin the development of reading habits through the use of reading lessons based on experience; the second is to introduce books and to train pupils to read from them; and the third is to train pupils to secure an increasing amount of information and pleasure through reading.

Aims of early lessons based on experience. The general aim of early lessons based on familiar experience and activities is to introduce pupils to reading as a thought-getting process and to develop a sight vocabulary of frequently recurring words. The justification for the use of such lessons lies in the fact that the more interesting and familiar the experience, "the more interpretation, that is, the more personal attitude there will be to carry over and attach to the printed word." The specific aims include the following items: (a) to stimulate keen interest in reading activities and a desire to read independently; (b) to associate meanings with symbols, to cultivate a thoughtful reading attitude, and to stimulate the habit of thinking about what is read, and (c) to acquire from meaningful reading activities and from phrase and word practice a sight vocabulary sufficiently rich to enable pupils to read under direction the simplest stories of the first book or reader to be used. As a rule, this includes

<sup>12</sup> Guy T. Buswell, Fundamenal Reading Habits: A Study of Their Development, Ch. II. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

<sup>13</sup> Charles H. Judd, Reading: Its Nature and Development, p. 182. Supplementary Educational Monographs, Vol. II, No. 4. Chicago: Department of Education, University of Chicago, 1918.

a sight vocabulary of fifty or more frequently used words and the habit of recognizing familiar words in thought units.

Essential activities. In order to secure rapid progress in early reading lessons, at least five types of activities are essential:

- 1. Interesting experiences which serve as a basis for reading lessons. These include group activities, excursions, plays, games, stories, rhymes, and discussions of objects and pictures. School systems follow various plans <sup>14</sup> in providing these experiences. For example, some schools <sup>15</sup> have organized sets of practice exercises based on cutting, pasting, and coloring activities which provide motives for reading and for learning to read.
- 2. Oral and silent reading lessons based on interesting experiences. The subject matter for these lessons is organized by the pupils and teacher during the reading or language period, written on the board or printed on charts by the teacher, and later mimeographed, hectographed or printed for use in reading classes.
- 3. The story hour and dramatization period. The activities of these periods prove very effective in stimulating a desire to read, in preparing pupils for the thoughtful interpretation of what they read, in enriching their experiences, in providing good models of expression, and in improving the language habits of children.
- 4. Frequent opportunities to read in connection with numerous classroom activities. The equipment of the room, attractive picture books on the reading table, announcements on the bulletin board, and the use of written and printed material in content studies, stimulate a desire to read and provide continuous opportunity for thoughtful reading. The fact should be noted that much of this early incidental reading is done silently, followed frequently by oral reading and more often by discussion.
- 5. Interesting games and drill exercises to aid in the recognition of words and groups of words which appear most frequently in incidental reading activities and in the early selections of the books which are read first. For detailed suggestions see Chapter IV.

On account of the brevity of this report very few suggestions con-

<sup>14</sup> New Materials of Instruction, Ch. I. Nineteenth Yearbook of this Society, Part I. Bloomington, Illinois: Public School Publishing Co., 1920.

<sup>&</sup>lt;sup>15</sup> Report of the Society's Committee on Silent Reading, Sec. 2. Twentieth Yearbook of this Society, Part II. Bloomington, Illinois: Public School Publishing Co., 1921.

cerning methods of teaching can be included at this point. Attention is called to the fact, however, that the technique of teaching reading lessons based on familiar experiences is admirably discussed by Parker's Types of Elementary Teaching and Learning. 16

Duration of early lessons based on experiences. Pupils who are prepared to learn to read when they enter school usually spend from four to six weeks on reading lessons based on experiences before books are introduced. This is on the assumption that eighty or more minutes are devoted daily to reading or to activities which prepare for reading lessons. Instruction of this type should be continued until pupils acquire keen interest in reading and a sight vocabulary sufficient to enable them to recognize without help a large majority of the words in the first lessons in a primer or reader. The pupils should not be forced at this stage of development, but should be allowed to advance somewhat deliberately.

Training pupils to read from books. As soon as pupils have made sufficient progress to justify the use of printed material, specific training should be provided in the technique of using books and in reading from them. This includes a number of steps of which the following are examples: creating interest in reading from books; training pupils to open books and turn pages carefully: examining the first book to be used in order to become familiar with its title. contents, pictures, familiar stories, and page numbers; training in the use of markers; studying pictures to learn what a story is about: learning to read short units of the page; and acquiring habits of "continuous, coherent, rapid, meaningful reading." 17 While pupils are learning to read from books, reading lessons based on their experiences and activities should be continued, as well as the work of the story hour, the dramatization period, and incidental reading in connection with various classroom activities. Furthermore, the reading table should be provided with a larger number of attractive books in order to stimulate interest in independent reading.

Broader reading program after books are introduced. As soon as

<sup>&</sup>lt;sup>16</sup> S. Chester Parker, Types of Elementary Teaching and Learning, Ch. V. Boston: Ginn & Co., 1923.

<sup>&</sup>lt;sup>17</sup> For methods of accomplishing these ends, see S. Chester Parker, Types of Elementary Teaching and Learning. Pp. 103-124. Boston: Ginn & Co., 1923.

pupils have learned to read from books, the possibilities of a reading program become wider and more varied. For the purpose of this report they may be classified into three groups:

- 1. Regular practice in reading each day for the purpose of developing attitudes, habits, and skills that are essential in all reading activities. This includes measuring the progress of pupils, determining individual needs, and providing remedial instruction.
- 2. Reading for information and direction in connection with all classroom problems and activities.
- 3. Independent and directed reading for pleasure and enjoyment in order to stimulate keen interest in, and to promote the development of, permanent habits of reading.

Recommendations relating to each of these groups of reading activities will now be presented.

- 1. Daily reading lessons. It is recommended that two periods each day be used for group and individual instruction in promoting the development of essential attitudes, habits, and skills in reading. It is not sufficient to provide pupils at this stage of development with opportunities to read. Specific attention must be given to the cultivation of appropriate reading attitudes and habits, to the elimination of undesirable ones, and to provision for the needs of pupils who encounter unusual difficulties in learning to read. It is evident that pupils who advance slowly will need much attention during regular reading periods. Those who advance rapidly may be excused from many of these lessons and may engage to advantage in independent reading activities. A list of desirable types of reading lessons follows:
- (a) Silent-reading and oral-reading lessons based on interesting experiences and activities of the pupils and on stories and informational selections in readers and other books to insure rapid growth in habits of intelligent interpretation.
- (b) Directed silent reading for information or pleasure to establish habits of continuous, intelligent reading and study.
- (c) Directed oral reading following silent preparation to develop ability to recognize increasingly large units of thought at each fixation and to read effectively to others.
- (d) Dramatization exercises to aid in mastering the thought of a selection, as a means of realizing experiences more fully, and as an

opportunity of giving to others one's own interpretation of the meaning of a selection.

- (e) Drill and exercises to establish habits of accuracy and independence in word recognition, rapid recognition, and a wide span of recognition. The problems of word recognition and phonetic analysis are discussed in detail in Chapter IV.
- (f) Supervised seat activities to train pupils in habits of independent study and in the thoughtful interpretation of what they read.
- (g) Self-directed seat activities, with appropriate check tests, to provide opportunity for pupils to read independently and to secure training in habits of careful, thorough work
- (h) Frequent tests of the progress of pupils and diagnostic and remedial steps, as described in Chapter X of this report.
- 2. Reading for direction and information in classroom activities. Reading should early form a natural and an essential part of most classroom activities. This type of reading takes the form of directions for work, announcements, records of classroom activities, mimeographed material, and printed selections which contribute to an understanding of problems in which the pupils are interested. The fact should be emphasized that when reading occurs in connection with a class activity, the reading process itself is of secondary importance. If pupils encounter difficulties, they should be given at once whatever help is needed so that the activity may go forward. A record should be made of the types of difficulties which are revealed and special help provided later during regular reading periods. A more detailed statement of the opportunities for reading in numerous activities and some of the problems that are involved appear in Chapter V.
- 3. Independent and directed reading for pleasure. As soon as pupils have learned to read with ease, a period should be used each day for promoting habits of independent reading for pleasure. At first, teachers will find it necessary to direct pupils during these periods. Interest in reading independently must be cultivated in many cases. The poorer readers will need help in securing meanings. All will profit by the teachers' comments, suggestions, and display of interest in particular selections. Either silent or oral reading may be used as best meets the needs of the occasion.

As soon as pupils give evidence of genuine interest in independent reading and ability to read thoughtfully with little or no assistance, they may be given the freedom of the reading or library table while the teacher aids those who have advanced less rapidly. This table should be provided with as many interesting books for young children as the school affords. Suggestions concerning the direction and supervision of the library reading activities of pupils are given in Chapter VI. Pupils who proceed satisfactorily at the reading table should be encouraged to take books home and to bring to school interesting books which they find in their home libraries. In other words, as soon as children show keen interest in reading and are able to read simple stories independently, definite steps should be taken to cultivate permanent interests in reading and the habit of reading independently.

Variations in program to meet the needs of special groups or of individuals. The program which has been outlined is planned to meet the needs of pupils who are prepared for reading at the beginning of the first grade and who advance at a normal rate of progress. Changes in the program should be made to meet the needs of special groups or of individual pupils within a group. Examples follow:

Pupils who learn rapidly. Fewer lessons for the mastery of fundamental habits; a larger number of self-directed reading activities; earlier introduction to and a larger amount of independent reading for pleasure and information; more provision for reading in connection with various studies and classroom activities

Pupils who learn slowly. More stimulation of interest by the teacher; a larger number of reading lessons to cultivate appropriate reading attitudes and habits; more attention to the establishment of right habits; detailed supervision of supplementary reading activities; a larger number of very simple selections for class use; more careful supervision of independent reading; more elaborate studies of individual difficulties.

Pupils who were unable to speak English when they entered school. A larger number of reading lessons based on familiar experiences; more conversation and discussion to accompany each lesson; very gradual introduction of new words; more emphasis on good pronunciation and enunciation; a larger amount of reading of very

simple selections; more reading and story-telling by the teachemore careful supervision of independent reading.

The fact should be remembered that pupils advance at differentes of progress. Provision must therefore be made in schools high two or more first-grade sections for the transfer of pupils frome to another whenever such changes are desirable.

Amount of time for reading. In a recent analysis <sup>18</sup> of the morprograms for rural schools in 26 state courses of study, it was four that 56 minutes were given to reading each day in the first grad. In a study <sup>19</sup> of thirty-one first-class schools of North Dakota, was found that the median number of minutes per day in the fir grade was sixty-five. In a study <sup>20</sup> of the amount of time given reading in forty-nine large cities, it was found that the avera was 84 minutes per day. In some cities as much as 120 minutes we given each day to supervised and self-directed reading activities.

Current practice with regard to time allotment developed who reading activities were limited almost exclusively to the reading period. According to the program which has been recommende reading is intimately related to practically every classroom activit It follows that less rather than more time should be used for dai reading practice. Furthermore, ample time must be provided for th enriched program of meaningful activities which has been recon mended for the first grade. Owing to differences in conditions, it impossible to suggest a time allotment for reading which will t equally appropriate for all schools. In general, 80 minutes per da is a reasonable time allotment in larger schools. Larger or smalle amounts of time may prove desirable in the case of pupils who lear slowly or rapidly. Experience has taught that this allotment may h greatly reduced through the wise use of incidental reading activities It is unwise, therefore, to hold every teacher in a school system t close adherence to a given schedule.

<sup>&</sup>lt;sup>18</sup> Charles M. Reinoehl, Analytic Survey of State Courses of Study for Rural Elementary Schools. P. 24. Bureau of Education Bulletin, No. 42, 1922. Washington: Bureau of Education.

<sup>&</sup>lt;sup>19</sup> H. H. Kirk, "Time distribution by subject and grade," Elementary School Journal, 23 (March, 1923), p. 537.

<sup>&</sup>lt;sup>20</sup> Fred C. Ayer, "Average time allotment in 49 large cities compared with Seattle." Second Yearbook, Department of Superintendence. Pp 139-143.

Number of boo's to be read. It has been definitely ascertained<sup>21</sup> that the pupils who read widely make more rapid progress than pupils who read a limited amount of material. Some classes read only two or three books under supervision, others from twenty to thirty. It is suggested that provision be made for reading at least twelve books under supervision during the first year. Some of these books should be read in group activities; others should be read individually. The fact should be remembered, however, that the pupils should interpret intelligently as well as read widely.

It is impossible to state at this time the most appropriate number of books to be read independently by children during the first grade. In one city which reported, the average number of books read by the pupils of a first-grade class was 30; the maximum, 38, and the minimum, 20. It is recommended that provision be made for the independent reading by each pupil of at least ten interesting books at home or at the library table. In the judgment of the committee a larger number may be read to advantage by pupils who make normal or rapid progress in learning to read.

Relative importance of oral and silent reading. The exact amount of emphasis which should be given in the initial period to oral reading and to silent reading is still an open question. The fact that silent reading is the type used most frequently, both in school and in adult life, justifies the recommendation that pupils should form habits of thoughtful silent reading from the beginning. The fact that oral reading is intimately related to spoken language makes it an economical and desirable means of promoting rapid growth in reading. On the other hand, the fact that pupils who learn exclusively by oral methods frequently become word readers indicates that there is danger in over-emphasizing oral-reading habits.

These facts justify the conclusion that pupils should be taught from the beginning to read both orally and silently. As a rule, approximately equal amounts of class time should be devoted to each type of reading in the first grade. This will result in much more silent than oral reading when all reading activities are considered. However, teachers who note the progress of pupils will find frequent justification for departing for a period of time from this general recommendation.

<sup>&</sup>lt;sup>21</sup> William S. Gray, Reading Survey of the St. Louis Public Schools. Yonkers-on-Hudson, New York: World Book Co., 1918.

Desirable levels of achievement. The following characteristics distinguish the pupil who has satisfactorily completed the requirements of the initial period:

- 1. Becomes completely absorbed in the content of interesting selections when reading independently.
  - 2. Reads silently with few or no lip movements.
- 3. Asks questions about and discusses intelligently the content of what is read.
- 4. Reads aloud clearly, naturally, and in thought units rather than by individual words.
- 5. Handles books with care, opens and turns pages properly, knows the order of paging, and is able to find readily what he is looking for.

The accomplishments and progress of first-grade pupils may be determined from time to time through the use of the following standardized reading tests:

#### Accomplishment

- 1. Recognizing the meanings of words seen
- 2. Interpreting simple sentences and paragraphs
- 3. Understanding and reproducing what is read
- 4. Rate of silent reading.
- 5. General accomplishment in speed and accuracy of oral reading
- 6. Rate and accuracy of oral reading

#### Test

Detroit Group Test in Word Recognition Haggerty Reading Examination,

Sigma I Starch Silent Reading Test

Starch Silent Reading Test

Starch Silent Reading Test Standardized Oral Reading Paragraphs

Gray Oral Reading Check Tests

The standard scores which accompany these tests are based on the results of reading instruction as it has been given in the past. Evidence has been secured which shows clearly that higher standards of achievement may reasonably be expected of first-grade pupils. For example, it was found in a recent unpublished study in which three tests were used that pupils who revealed at the end of the first grade the five qualities described above made on the average distinctly superior scores. The standard scores, as well as the average scores, of these pupils which are suggested as desirable standards, are presented here for purposes of comparison.

Haggerty Reading Examination, Sigma I, Test I Standard Score, 4 Desirable Standard, 5 Starch Silent Reading Test
Standard Score, Comprehension 15
Rate per minute 90
Desirable Standard, Comprehension 18
Rate per minute 100

Standardized Oral Reading Paragraphs Standard Score, 31 Desirable Standard, 40

The scores which have been described represent desirable levels of achievement at the end of the initial period. They may be attained by a large proportion of first-grade pupils at or very near the end of the year. They may be easily surpassed by many pupils who learn to read easily. They may not be attained by many pupils until well into the second grade. As rapidly as pupils reach the suggested standards, provision should be made for the broader program of reading activities recommended in the next section for second- and third-grade pupils.

# E. Period of Rapid Growth in Fundamental Attitudes, Habits, and Skills

### Second and Third Grades

Distinguishing characteristics and duration of the period. Each period in an effective reading program is characterized by the enrichment of experience and the cultivation of interest in reading activities. In addition, the third period has been distinguished as one of rapid growth in the fundamental attitudes, habits, and skills on which intelligent interpretation, speed of silent reading, and fluent, accurate oral reading depend. By the end of this period pupils should be able to read independently and intelligently, either orally or silently, simple content material such as is usually assigned in the fourth grade.

Studies of the progress of pupils show that a large proportion of them fulfil all requirements of this period during the second and third grades. Therefore, the problems of the third period will be referred to in the discussions that follow as the normal problems for these grades. In doing so, four facts are clearly recognized, namely, that pupils who enter the second grade differ widely in achievement and require instruction at different levels of advancement, that they move forward through the second and third grades

at different rates of progress, that many pupils who learn rapidl are prepared for more advanced work much earlier than the end of the third grade, and that pupils who learn slowly require in the fourth and even in the fifth grades instruction similar to that recommended for this period.

Specific aims. The specific aims of instruction in reading fo pupils who make normal progress during the second and thir grades follow:

- 1. To provide a rich variety of reading experience based on th world's greatest stories for children and on informational materia relating to numerous topics which are studied in content subject or which challenge the pupils' interest in other activities.
- 2. To stimulate keen interest in reading wholesome books and selections for pleasure and information and to establish the habi of reading independently.
- 3. To secure rapid growth in habits of intelligent interpretation This includes the following items: (a) Rapid progress in the interpretation of the important ideas of simple passages, such as those in the Courtis Silent Reading Test, No. 2. By the end of the third grade, pupils should be able to interpret such passages with a high degree of accuracy. (b) Steady progress in reading different types of material for various purposes, such as finding answers to questions, following directions, and remembering what is read, and in interpreting increasingly difficult passages, such as those in the Monroe Silent Reading Test.
- 4. To increase the rate and accuracy of oral reading and of silent reading. This includes rapid progress in habits of accurate recognition, rapid recognition, a wide span of recognition, a wide eye-voice span, and the rhythmical progress of perception along the lines. In fact, progress in the development of these habits is more rapid during the second and third grades than during any other period.
- 5. To provide for the development of desirable habits of interpretative oral reading and of appropriate standards in specific oralreading situations.
- 6. To continue training in the skilful use of books, to familiarize pupils with the privileges and opportunities of libraries, and to teach them to withdraw and return books.

Provision for essential types of reading activities. In order to accomplish these aims in the second and third grades, provision

must be made for at least three general types of activities, namely: daily reading lessons, wide reading in connection with numerous classroom problems and activities, and much independent reading, both in and out of school. Important problems in connection with each type will now be considered.

Purpose of daily reading lessons. An essential purpose of all reading activities is to enrich experience and to stimulate and broaden the reader's interests. In addition, daily practice in reading has three purposes which are peculiarly appropriate in the second and third grades, namely: (a) to develop power as a reader, that is, to secure rapid growth in ability to deal successfully with increasingly difficult reading situations, (b) to make desirable habits permanent, and (c) to eliminate or correct undesirable habits.

Time allotment. In an analysis of the daily programs in twenty-six state courses of study,<sup>22</sup> it was found that the average number of minutes per day recommended for reading in rural elementary schools was 72 for the second grade and 63 for the third grade. In a study <sup>23</sup> of the time schedules of thirty-one first-class schools of North Dakota, it was found that the median number of minutes per day for reading was 50 for both the second grade and the third. The daily allotment varied from 25 to 90 minutes for the second grade and from 15 to 80 for the third. In a study <sup>24</sup> of the amount of time given to reading in forty-nine cities, it was found that the average was 81 minutes per day for the second grade and 66 for the third.

Current practice would justify a recommendation of about 70 minutes a day for reading in the second grade and 60 in the third grade, varying somewhat with the size of the school and the type of class organization. The fact should again be remembered, however, that current practice developed when reading activities were limited almost exclusively to the reading period. Since reading is

<sup>&</sup>lt;sup>22</sup> Charles M. Reinoehl, Analytic Survey of State Courses of Study for Rural Elementary Schools, P. 24. Bureau of Education Bulletin, No. 42, 1922. Washington: Bureau of Education.

<sup>&</sup>lt;sup>28</sup> H. H. Kirk, "Time distribution by subject and grade," *Elementary School Journal*, 23 (March, 1923), p. 537.

<sup>&</sup>lt;sup>24</sup> Fred C. Ayer, "Average time allotments in 49 large cities compared with Seattle," The Elementary School Curriculum. Second Yearbook of the Department of Superintendence. Washington: Department of Superintendence, National Education Association, 1924.

intimately related to practically all school activities in the program which is here recommended, it follows again that less rather than more time will be needed for formal instruction in reading. On the other hand, far more time should be given to activities that enrich experience and provide incidental reading practice than is used for such purposes in most classrooms to-day.

Developing power as a reader. The work of one recitation period daily during the greater part of the second and third grades should take the form of carefully directed training for the purpose of developing power as a reader A list of types of activities that are valuable in this connection follows:

- 1. Silent reading to develop habits of intelligent interpretation. Such lessons require reading for specific purposes (such as finding answers to questions), selecting important points and supporting details, dividing a selection into its major thought units, securing information for oral reproduction or for use in class discussions, and following directions. This training should secure rapid growth in both accuracy and depth of interpretation and should lay the foundation for good study habits. Selections from graded readers or from books containing informational material may be used to advantage in accomplishing these purposes.
- 2. Group oral reading and class discussions to stimulate additional growth in habits of thoughtful reading. The oral reading may be preceded to advantage by thoughtful silent reading for the purpose of answering assigned questions or to solve one or more problems. It should be accompanied by discussions which stimulate good thinking and provide opportunity to compare, weigh values, and draw conclusions. Selections from graded and supplementary readers, as well as from other interesting books, may be used in this connection. The fact should be remembered, however, that growth in intelligent interpretation can probably be secured most effectively through silent-reading activities.
- 3. Practice to improve the form and quality of oral reading. Such lessons should provide strong motives for good reading and real audience situations. Teachers should discuss appropriate standards in reading specific selections; they should also read aloud frequently in order that pupils may hear good reading and acquire desirable habits through imitation. Individual assignments as well as group exercises should be provided. Supplementary readers, interesting

stories and dramatic readers are valuable sources of good practice material.

- 4. Drill exercises, when needed, to increase accuracy and independence in word recognition. This includes drill on unphonetic words which cause difficulty, as well as systematic training in the phonetic analysis of short words and in the syllabication of words of two or more syllables when such help is needed. Specific suggestions concerning appropriate types of training are given in Chapter IV.
- 5. Special training is needed frequently to increase the rate and span of recognition. Flash-card exercises based on words and phrases which appear frequently in reading lessons are excellent for this purpose. In addition, instruction is needed in the use of books and in the technique of withdrawing them from the library and returning them to it.

The types of lessons which have been outlined are usually provided during the morning period. The amount of time which should be given to each type depends on the needs and progress of the pupils taught. Some may be excused to advantage from many of the lessons that are assigned; others will need special training in addition to that provided for the group as a whole. It follows that teachers should study the accomplishments of their pupils constantly and provide instruction each day for the class as a whole or for individual pupils which will secure progress in one or more specific phases of reading.

Making desirable habits permanent. Numerous opportunities to read relatively simple selections should be provided, preferably durng afternoon periods, for the purpose of promoting the permanent establishment of reading attitudes, habits, and skills which have been partly developed, but not perfected. The justification for using simple selections lies in the fact that pupils are able to read with reasonable ease and rapidity. When relieved of the need of deternining numerous meanings and pronunciations, they become intersted in the content, they proceed rapidly in silent reading, and they roup their words together effectively in oral reading. Current reading programs may be justly criticized because they fail to provide upils with sufficient opportunity to read relatively simple selectors until essential attitudes, habits, and skills are thoroughly estabshed. If the reading materials used contain valuable content, there

is no danger of over-learning, such as occurs in practice on some habits and skills. A list of reading activities of recognized value in making desirable habits permanent follows:

- 1. Supervised silent reading for information, the pupils reading to accomplish a specific purpose, such as to find out how a story ends or how cotton is grown and marketed. A series of valuable tests of comprehension for use in such reading activities is suggested in Chapter IX.
- 2. Directed silent reading for pleasure. Pupils should be given frequent opportunity to read for fun. As the pupils read, the teacher should observe their reading habits and make constructive suggestions in individual cases. The selections used should be highly entertaining and calculated to develop permanent interest in independent reading.
- 3. Oral reading at sight, with attention directed to the content If pupils encounter difficulties, the teacher and the class give such help as may be needed and the reading continues. A note is made by the teacher of errors and specific training is provided later in a drill period. As soon as pupils are able to read fluently and accurately at sight, they should be excused from practice of this type.
- 4. Dramatization, as a motive for wide reading with a purpose and as an opportunity for the cultivation of good habits of oral expression. Pupils should be given wide freedom in selecting appropriate parts to dramatize, in selecting characters and arranging scenes, and in giving their own interpretation of a story.
- 5. Motivated oral reading of relatively simple selections in audience situations. To a large extent pupils should read selections of their own choice or simple passages, assigned by the teacher, which are appropriate for given occasions, such as a Thanksgiving program.

In addition, there should be wide reading in other classes of simple content material to secure information for use in class discussions and much independent reading for pleasure, both in and out of school. These types of reading are discussed more fully in later paragraphs. If the materials read are sufficiently interesting and relatively simple, such reading activities will contribute to rapid progress in the permanent establishment of desirable reading attitudes and habits.

Eliminating or correcting undesirable habits. Abundant provision should be made in the second and third grades to correct or eliminate undesirable habits. Such steps are necessary in order that pupils may early form desirable habits and in order that undesirable habits may not be permanently established. Therefore, a part of the time set aside daily for reading should be used for corrective and remedial work. A list of appropriate opportunities for eliminating or correcting undesirable habits follows:

- 1. In many lessons planned to develop power in intelligent silent reading and in fluent, accurate oral reading, errors which interfere with thought-getting or giving may be corrected when they occur and constructive suggestions offered. Care should be observed, however, not to let corrections inhibit the interest and co-operation of the reader.
- 2. The errors and difficulties which occur in reading relatively simple material and in the reading which is done in connection with other classroom studies and activities should be noted. Special drill or reading practice should be planned during a morning reading period which will aid individual pupils or small groups of pupils in overcoming their difficulties.
- 3. Tests should be given frequently in either the morning or afternoon reading period to all members of a class to determine their accomplishments and needs in rapid recognition, in accurate recognition, in span of recognition, and in the rapid grasp of meanings. Numerous examples of appropriate tests are given in Chapter IX. Drill exercises should be provided for those who need training in specific reading habits. As soon as the fact has been ascertained that given pupils have formed desirable habits, they may be excused from drill exercises. The training should be continued in the case of other pupils until satisfactory progress has been made.
- 4. Time should be reserved each week for diagnostic and remedial instruction. There are pupils in each classroom who encounter unusual difficulties in reading. In many cases the cause of such difficulties cannot be determined and appropriate instruction provided without detailed studies of their reading habits. While the teacher is giving attention to pupils who need special help, the remainder of the pupils may with advantage read independently for pleasure or information. Diagnostic and remedial steps appropriate for use in second- and third-grade classes are discussed in Chapter X.

Importance of planning to secure specific results. The discussion of daily reading lessons has shown that various types of reading activities are essential in enriching the experiences of pupils, in stimulating keen interest in reading, in developing power as a reader, in making desirable habits permanent, and in correcting or eliminating undesirable habits. It remains to emphasize the fact that the work of each reading period should be planned to secure progress in one or more specific phases of reading. It has been customary in the past for teachers "to hear pupils read" day after day with little or no variation in the purpose or methods of teaching. Supervisors justly condemn such practices as ineffective and even harmful. In order to train pupils to be intelligent, thoughtful, independent readers, lessons must be planned to secure definite progress each day in one or more important phases of reading.

Wide reading for information and pleasure in most classroom activities. The fact was emphasized earlier that reading should form a natural part of most classroom activities. The habit of reading widely in connection with the various problems which are studied in the second and third grades is very desirable for three reasons: it is an important means of extending and enriching the experiences of pupils; it supplements to distinct advantage the somewhat limited first-hand experience and the oral reports which the teacher and pupils can provide, and it establishes habits of independent recreational reading and study which are essential in all grades above the third. One reason why so many pupils fail in content subjects in the fourth grade is because they have not been trained to interpret simple factual material effectively.

The reading opportunities which should be provided include reports based on the experiences and activities of the pupils, directions for work, assignment sheets, mimeographed copies of materials which cannot be supplied to the pupils in printed form, textbooks, supplementary readers relating to specific fields of interest, such as the life of children of foreign lands, and general library books. The reading which is done should represent both the work and the play types. The fact should be emphasized that the amount of reading at the play level should be greatly increased. This type of reading contributes a wealth of new experience and develops permanent interests in reading about a wide variety of topics. The specific problems of teaching pupils to read in connection with classroom activities are discussed in detail in Chapter V.

Independent reading for pleasure and information. The third type of reading activity which should be provided includes independent reading in school and at home. Such reading is indispensable in increasing the experiences of boys and girls, in stimulating keen interest in reading, and in training them in the wholesome use of leisure time. Provision for a large amount of independent reading in the second and third grades is justified inasmuch as investigations show that most pupils are prepared for it by the beginning of the second grade or shortly after that time and that the pupils who read widely advance most rapidly.

Each classroom should have its reading table or shelves to which the pupils may go during free hours or after other work has been completed. Provision should also be made for pupils to secure books to read at home. Public libraries in many cities send to the school books from which pupils choose those they wish to read. In other cities school libraries provide appropriate books. On the return of a book the pupil may tell to the teacher or to the class the incidents he liked best, or he may read sections which proved most interesting. In some schools the pupils frequently dictate or prepare brief written reports of the stories read, emphasizing points which interested them most. These are filed and referred to frequently in helping other pupils select books to read. For suggestions concerning such reports, see Chapter VI.

Three types of activities should be provided, preferably during afternoon periods, in supervising and directing the independent reading of pupils.

- 1. Silent-reading periods early in the second grade to determine if pupils are able to read to themselves effectively. As the pupils read silently the teacher should observe their reading habits. One evidence of preparation for independent reading is the fact that pupils become completely absorbed in the content of what they read. Teachers should make records of the needs of pupils who cannot read simple selections without help and should provide appropriate types of training during regular reading periods.
- 2. Reading of parts of stories by the teacher or the pupils to stimulate general interest in reading the remainder of selections or books independently.
- 3. Reports and discussions by the pupils of their outside reading; also individual conferences initiated by the teacher to aid pupils who

read but little to find books and selections which they would like to read.

Desirable levels of achievement. Pupils who complete satisfactorily the requirements of the third period of reading instruction reveal the following characteristics:

- 1. They have thoroughly established the habit of reading independently.
- 2. They interpret effectively the reading materials assigned in connection with other school activities and are able to discuss or to make use of the content of what they read.
- 3. They inquire about or independently seek for reading materials which relate to the problems or activities in which they are interested.
  - 4. They read more rapidly silently than orally.
- 5. They are able to read orally at sight with ease and effective expression, provided the materials assigned do not contain word difficulties or difficulties of meaning.

The achievement and progress of pupils may be determined objectively at frequent intervals through the use of the following standardized reading tests:

Burgess Scale for Measuring Silent Reading Ability Courtis Silent Reading Test, No. 2 Gray Oral Reading Check Tests Haggerty Reading Examination, Sigma I Monroe Silent Reading Test Standardized Oral Reading Paragraphs Stanford Reading Examination Starch Silent Reading Test

The fact should be remembered that the standard scores which accompany these tests are based on the results of reading instruction as it has been given in the past. Evidence has been secured which shows clearly that schools may easily surpass current standards of accomplishment by providing effective instruction in harmony with the reading program which has been recommended. For example, a study of the scores of pupils who had fulfilled all requirements of this period by the end of the third grade justifies the following general description of desirable standards: a score of 50 or better in the Standardized Oral Reading Paragraphs, a score of 62 or better in the Burgess Scale for Measuring Silent Reading

Ability, a rate score of 150 or more words per minute in the Courtis Silent Reading Test, and a comprehension score of approximately 100 in the same test. A more detailed statement of desirable standards follows. Only those tests are included for which the necessary data have been secured. The standard scores, as well as the proposed desirable standards, are included for purposes of comparison. Desirable standards should be determined for the other tests listed above.

1. In the interpretation of what is read:

Courtis Silent Reading Test, No. 2 Standard Scores: Grade II, 59; Grade III, 78 Desirable Standards: Grade II, 70; Grade III, 95 Burgess Scale for Measuring Silent Reading Ability Standard Scores: Grade III, 50 Desirable Standards: Grade III, 56

2. In speed of silent reading:

Courtis Silent Reading Test, No. 2
Standard Scores: Grade II, 84 words per minute
Grade III, 113 words per minute
Desirable Standards: Grade II, 105 words per minute
Grade III, 135 words per minute
Starch Silent Reading Test
Stordard Scores Grade II, 18 per second

Standard Scores: Grade II, 1.8 per second
Grade III, 2.1 per second
Desirable Standards: Grade II, 120 words per minute
Grade III, 150 words per minute

3. In speed and accuracy of oral reading: Standardized Oral Reading Paragraphs Standard Scores: Grade II, 43; Grade III, 46 Desirable Standards: Grade II, 45; Grade III, 50

F. WIDE READING TO EXTEND AND ENRICH EXPERIENCE AND TO CULTIVATE IMPORTANT READING ATTITUDES, HABITS, AND TASTES

Fourth, Fifth, and Sixth Grades

Essential characteristics and duration of the period. Appropriate reading instruction during the fourth, fifth, and sixth grades is distinguished by provision for wide reading to extend experience, to stimulate the thinking powers of the reader, and to further develop important reading attitudes, habits, and tastes. Each content subject, as well as the reading and literature period, contributes lirectly to the development of effective habits of reading. Opportunities are unlimited during this period for the enrichment of experience and for the cultivation of wholesome interests in reading. The normal work of the period continues until pupils have learned to read effectively for a wide variety of purposes and until

habits of rapid silent reading approach maturity. As instruction in reading improves, most pupils will reach this stage of development by the end of the sixth grade, or earlier.

Specific aims. The aims of reading instruction which are appropriate for the fourth, fifth, and sixth grades follow:

- 1. To provide rich and varied experiences in practically every field of thought and activity for which pupils are prepared, such as history, biography, geography, travel, science, art, recreation, and literature. Abundant opportunity should be provided for reading relatively simple material in the classroom, in the library, and at home. Each content subject, as well as the reading period, should contribute to rapid growth in experience. It is far more important in these grades for pupils to acquire rich experience through reading relatively simple material than it is to develop ability to read difficult selections accurately.
- 2. To continue the development of interest in entertaining, instructive, and worth-while reading, and to give elementary training in the sources and values of different types of reading material. Special effort should be made to develop strong, wholesome motives for reading among pupils who do not read widely.
- 3. To promote rapid growth in habits of intelligent interpretation. This includes (a) to refine and use widely habits of interpreting simple selections accurately and of thinking clearly about the content of what is read, (b) to make progress in dealing successfully with increasingly difficult problems of interpretation, such as are illustrated in the Monroe Silent Reading Tests and the Thorndike-McCall Reading Tests, and (c) to develop habits of reading effectively for a wide variety of useful purposes, such as:

Selecting the aim or purpose of a passage
Finding important points and supporting details
Finding answers to questions
Collecting information which will aid in the solution of a problem
Grasping the organization of what is read
Making judgments on the basis of facts presented
Determining the validity of statements
Making keen, critical interpretations of passages
Following directions
Remembering what is read to reproduce it or to make use of it in
some other way
Appreciating the thoughts, sentiments and ideals expressed

- 4. To improve and refine the habits of recognition in both oral and silent reading. This includes the development of greater speed, accuracy, and independence in word recognition, a decrease in the number and duration of fixations, and the elimination of most regressive movements. Special emphasis on speed of silent reading is appropriate during this period.
- 5. To improve the quality of oral interpretation and to develop standards for use in oral-reading situations. It is important that strong motives for reading and real audience situations be provided.
- 6. To provide systematic instruction in the economical and skilful use of books, in the privileges and opportunities which libraries afford, and in the intelligent use of library privileges. Special training is necessary during this period in the use of dictionaries, encyclopedias, and other sources of information which well-equipped schools provide.

Essential types of reading activities. In order to accomplish the aims of reading instruction in the fourth, fifth, and sixth grades, provision must be made for at least the following types of reading activities:

- 1. Supervised silent reading during a daily library period.
- 2. Systematic instruction in reading and study habits; testing; diagnostic and remedial work.
- 3. Specific instruction in each content subject concerning habits of effective reading and study peculiar to that subject.
- 4. Group reading and discussion of simple, interesting literary selections for enjoyment, growth in appreciation, and power of interpretation.
- 5. Opportunity for motivated oral reading and for the development of standards appropriate for use in oral reading situations.
- Ample provision for independent reading during free periods and at home.

This outline includes a wide variety of activities for which provision should be made. It is recommended that two periods be provided each day. One period should be used for the following activities: (a) systematic instruction in reading and study habits; (b) testing, diagnosis, and remedial work; (c) training in the use of books, libraries, and sources of information; (d) group reading and discussion of simple literary selections, and (e) instruction to improve oral interpretation and to develop appropriate standards.

The second period may be used (a) for supervised library reading;

- (b) for stimulating and directing the reading interests of pupils;
- (c) for checking on outside reading, and (d) for diagnostic and remedial work. If time cannot be provided daily for both a library and a reading period, the program adopted should give to each group of activities its due share of time.

In any discussion of a desirable reading program for the fourth, fifth, and sixth grades, the fact cannot be emphasized too vigorously that the essential aims of instruction are attained primarily through wide reading. The plan has been adopted, therefore, of discussing first the problems of teaching which relate to library reading and to reading which accompanies the study of content subjects. The more detailed problems of the regular reading period will be considered in later paragraphs.

The library period. Many schools provide a period each day during which pupils may go to a library room in the building or to a reading table in the classroom to read for pleasure or information. As a rule, they are allowed to select and read whatever interests them. A record is kept of the books read by each pupil. The teacher, or the librarian who is in charge, has three responsibilities, namely:

(a) to aid pupils in selecting books which will be of interest to them;

(b) to observe their reading habits, correct minor errors, such as lip-movements, give help to those who request or need it, and make a record of errors and difficulties which in her judgment should receive additional attention during the regular reading period; and (c) to give remedial instruction frequently to pupils who are in need of such help.

The activities of the library period are extremely valuable for several reasons. They aid in the permanent establishment of habits of independent reading; they acquaint pupils with various types of interesting wholesome reading materials, thus broadening their range of interests in reading; they provide for the rapid enrichment of experience; they aid in the improvement and refinement of habits of silent reading, and they provide opportunity in many schools for individual help and remedial instruction. Supervised library reading is essential to an effective program of reading activities in the fourth, fifth, and sixth grades. Suggestions concerning appropriate books for a library appear in Chapter VII.

Reading in content subjects. The fact has been emphasized that

each content subject should provide a wealth of relatively simple reading material. The books for a given class should vary somewhat in difficulty in order to meet the needs of pupils at different levels of advancement. It is particularly desirable to supply poor readers with relatively easy reading material which they can read and understand readily. Two types of reading material with respect to content should be provided. The first includes information which is essential to the solution of class problems and which should be read carefully for specific purposes. The second includes very interesting supplementary materials which can be read at the play level during study periods, in the library, or at home, in order to broaden and enrich the experiences gained through intensive study.

The problems of teaching pupils to read and study effectively materials assigned in content subjects may be provided for in two ways. First, those attitudes, habits, and skills which are common to a large number of reading situations, such as following directions, selecting and outlining major points and supporting details of a passage, or using a dictionary, should be made the basis for specific training during regular reading periods. Teachers should anticipate the general reading needs of pupils in content subjects and should provide training in essential habits somewhat in advance of their actual use in study activities. In addition, training should be provided in each content subject in those reading habits which are peculiar to it, such as reading to find the essential conditions of a problem in arithmetic. Detailed suggestions concerning methods of teaching pupils to read effectively in content subjects are given in Chapter V.

The reading of literature. The group reading of simple, interesting literary selections has several distinct values. It provides opportunity for pupils to learn of and interpret many types of experience, unhampered by the requirements which frequently accompany the study of problems in content subjects. It acquaints pupils with valuable books and selections which would otherwise escape their attention. It secures growth in ability to interpret and appreciate selections of superior quality. This is largely the result of discussions and activities which frequently accompany the group study of selections. It also acquaints pupils with the values of different types of reading material and stimulates wider interest in reading than might otherwise be developed.

Provision should be made for the wide reading of wholesome books and selections, rather than for the intensive study of a limited amount of material. The story or experience as a whole should be emphasized rather than detailed facts. Teachers should frequently suggest books and selections to read which relate to the lines of interest cultivated in the study of specific selections. Children should be encouraged to bring to school or to report on interesting books or selections which they have read at home. Interpretative oral reading may be emphasized to advantage during the literature period when selections are studied which may be read aloud to advantage. On such occasions teachers may read frequently in order to provide good models of expression and to acquaint pupils with the beauties of selections, particularly poetry, which cannot be done so effectively in silent reading periods. Additional suggestions concerning methods of teaching literature in the fourth, fifth, and sixth grades are presented in Chapter VI.

Independent reading in school or at home. A common aim of supervised library reading, of reading and study in content subjects. and of group reading of literary selections is the enrichment of experience and the stimulation of keen interest in reading. In order to establish habits of independent reading, pupils should be encouraged to read at home or during free periods the interesting books and selections discovered during the library period. Similar provision should be made for reading independently interesting books relating to topics studied in content subjects or during the literature period. There should be the closest co-operation between various school activities in stimulating interest in reading and in establishing independent reading habits. Each classroom activity should frequently stimulate interests which can be satisfied through reading The school library should provide the necessary books which may be read both at home and in school. If pupils are keenly interested in given books and selections, there is little or no need of imposing artificial checks to determine the thoroughness of the reading. The natural time to report on such readings is in connection with the study and discussion of problems to which they relate. It may be desirable at times, however, to provide special periods in which pupils may report to their classmates and teacher special contributions gained through their reading.

Regular reading periods. As a rule, from two to three days should

be used each week for a variety of activities which aim to promote good habits of reading and study on the part of all pupils. Instruction in some schools is justly criticized because no organized effort is made to bring each pupil to a satisfactory level of efficiency in all phases of reading by the end of the sixth grade. In order to avoid this difficulty, it is recommended that regular periods be set aside each week for systematic training and drill, if it is needed. On the other hand, reading instruction in many schools is limited to drill exercises and to the group study of selections found in readers. In order to avoid this error, opportunity should be provided for wide reading in the library, at home, and in each content subject, as well as during the literature period.

It is impossible, for several reasons, to recommend a program of activities for the regular reading periods which will meet equally well the needs of all schools. In the first place, pupils enter each grade who differ widely in reading achievement and needs. For example, many pupils who enter the fourth grade have not learned to read simple content material effectively and need training similar to that recommended for second- and third-grade pupils. In such cases most of the regular reading periods should be used for systematic instruction at the appropriate level of advancement. This training should be supplemented by provision for wide reading in the library, at home, and in content subjects. On the other hand. some pupils who enter the fourth grade are two or three years in advance of normal expectancy in reading. It is evident that little or no formal drill is necessary for them and that the regular reading periods may be used to advantage for other purposes. The problem of instruction in these grades is further complicated by the fact that some pupils advance in reading more rapidly than other pupils and that a given pupil advances in some phases of reading more rapidly than in others. Because of the wide variety of problems which are encountered by teachers in providing for group and individual needs, the plan has been adopted of recommending types of training which have proved valuable in the fourth, fifth, and sixth grades. It will be necessary for each teacher to make continuous studies of the needs of her pupils in order to determine which types of training should be emphasized most.

1. Careful reading of selections under direction in order to cultivate a thoughtful reading attitude and to improve comprehension.

- 2. Training in habits of study which are common to several reading situations, such as following printed directions, using books economically and effectively, and making outlines or organizations of materials read.
- 3. Exercises to increase speed of silent reading. The wide reading of simple interesting selections is without doubt one of the most effective means of increasing the rate of reading. Timed exercises, with attention directed to the content, are also valuable in this connection.
- 4. Training in habits of recognition As a rule, this involves training in word analysis, in the use of diacritical marks, and in the rules of accent and syllabication. It may also include drill in phonetic analysis, in rapid recognition, and in span of recognition.
- 5. Specific practice to overcome difficulties and errors noted in the various reading activities in which pupils engage. Teachers should keep a daily record of such difficulties and should provide special periods of training as frequently as occasion demands.
- 6. Systematic testing of the achievements of pupils. Needed instruction should be provided for entire classes, small groups, or individual pupils.
- 7. Diagnostic and remedial work. While the teacher is engaged in these activities with one or more pupils, the remainder of a class may devote themselves to a special assignment or they may read independently at their seats or at the library table books in which they are interested.

The profitable use of the regular reading period cannot be overemphasized. Each teacher should study the needs of her pupils so carefully and provide appropriate group and individual instruction so effectively that no pupil will reach the end of the sixth grade who has not formed desirable reading attitudes, habits, and skills.

Desirable levels of achievement. Pupils who complete satisfactorily the requirements of the fourth period of reading instruction reveal the following characteristics by the end of the sixth grade:

- 1. They are familiar through reading with many of the common fields of human experience.
- 2. They have acquired strong motives for, and keen interest in, reading for information and pleasure.

- 3. They have developed a broad foundation in habits of intelligent interpretation and study, including reading for a variety of useful purposes.
- 4. They approximate maturity in the fundamental habits of reading, such as rate and accuracy of recognition, a wide span of recognition, rhythmical progress of perception, a wide eye-voice span in oral reading, and speed in silent reading.
- 5. They use books, dictionaries, encyclopedias, and sources of information economically and skilfully.

The achievements of pupils may be determined objectively and compared with current standards of accomplishment through the use of the following standardized reading tests:

Burgess Scale for Measuring Silent Reading Ability Chapman-Cook Speed of Reading Test Courtis Silent Reading Test, No 2 Gray Oral Reading Check Tests Monroe Silent Reading Test Standardized Oral Reading Paragraphs Stanford Reading Examination Starch Silent Reading Test Thorndike-McCall Silent Reading Tests

The fact has been emphasized in earlier chapters that the standard scores which accompany reading tests are based on the results of instruction as it has been given in the past. In a study including the use of five standardized tests, evidence was secured which shows that schools may easily surpass current standards of accomplishment by providing wide reading opportunities and by making use of improved methods of teaching. In the outline which follows, the average scores are given of pupils who satisfactorily fulfilled the requirements of the fourth reading period at the end of the sixth grade. The standard scores as well as the proposed desirable standards are included for purposes of comparison. Desirable standards should be determined for the other tests listed above.

## 1. In depth of comprehension:

Monroe Silent Reading Test
Sixth-Grade Standard Score, 21
Desirable Standard, 23
Thorndike-McCall Silent Reading Test
Sixth-Grade Standard Score, 53.7
Desirable Standard, 56

2. In rate of accurate interpretation:

Burgess Scale for Measuring Silent Reading Ability Sixth-Grade Standard Score, 50 Desirable Standard, 56

8. In speed of silent reading:

Starch Silent Reading Test
Sixth-Grade Standard Score, 192 words per minute
Desirable Standard, 250 words per minute

4. In speed and accuracy of oral reading:

Gray Oral Reading Test Sixth-Grade Standard Score, 48 Desirable Standard, 55

G. THE PERIOD OF REFINEMENT OF SPECIFIC READING ATTITUDES, HABITS, AND TASTES<sup>25</sup>

The Junior- and Senior-High-School Grades

Distinguishing characteristics of the period. By the time pupils enter the seventh grade, a large majority of them approach maturity in the fundamental habits of both oral and silent reading. They have made notable progress in habits of intelligent interpretation and in reading effectively for different purposes. They have acquired strong motives for reading, and they have developed numerous habits and skills which are essential in the effective use of books, libraries, and sources of information. By virtue of such accomplishments, seventh-grade pupils enter a period in which specific reading attitudes, habits, and tastes should be rapidly refined and perfected. The ultimate goal is to secure independence and efficiency in all school and life activities that involve reading.

A second distinguishing characteristic of the period is emphasis on conscious learning. In the primary grades, growth in ability to read begins by unconscious imitation of the teacher and by following her directions. In the fourth, fifth, and sixth grades, the habits thus initiated are further developed through wise direction and supervision. In the junior and senior high schools, skilful direction is continued and supplemented by simple explanations of reading processes, deliberate study by the pupils of their own habits, and

<sup>&</sup>lt;sup>25</sup> Special acknowledgment is due to S. A. Leonard and R. L. Lyman for sections of this chapter and for numerous constructive criticisms of the chapter as a whole.

further extensive practice to secure improvement.<sup>26</sup> A reasonable survey may now be undertaken with the pupils of the causes for, and the nature of, those habits and skills that make pupils proficient in various reading activities.

Specific aims. The specific aims of reading in junior and senior high schools follow:

To extend further the experiences of pupils and to increase greatly their intellectual apprehension. Each subject studied should require wide reading of books, selections, newspapers, and periodicals that contribute to a broader understanding of the problems studied.<sup>26</sup> Both recreational and work-type reading should be included.

- 2. To promote and refine reading interests and tastes which will direct and inspire the present and future life of the reader and provide for the wholesome use of leisure time.<sup>20</sup> Special attention should be given at this time to the development of permanent interest in current events and of the habit of reading periodicals with speed and good judgment. It is equally important to acquaint pupils somewhat thoroughly with the sources and values of different types of reading material and to develop standards for use in selecting materials to read.
- 3. To promote vigorously on all occasions habits of intelligent interpretation, to improve and refine the habits that are involved in reading for different purposes, and to stimulate and direct keen critical interpretations of what is read. Reading at this level of advancement, as well as in the earlier grades, should be largely a process of thinking and every effort must be made to inculcate effective habits while reading.
- 4. To provide individual or group instruction in the fundamental habits of silent and oral reading whenever the need for it exists.
- 5. To improve and refine habits of expressive oral reading, particularly of literary and dramatic selections, and in connection with public and class activities that require it.
- 6. To develop a high degree of skill in the use of books and library privileges, and to make rapid progress in locating, collecting, and summarizing printed materials.

<sup>&</sup>lt;sup>26</sup> For parallel and supporting statements, see pp. 31-32, Reorganization of English in Secondary Schools, Bureau of Education Bulletin, No. 2, 1917. Washington: Bureau of Education.

Essential reading activities. In order to accomplish these aims, six types of reading activities should be provided and carefully directed. They are: (a) the work or study type of reading in practically all subjects; (b) extensive reading of assigned or suggested references to supplement the information gained from intensive study and class discussions; (c) group recreational reading and enjoyment of selections of good literature; (d) interpretative oral reading in class when occasion demands, in connection with public appearances, and in the enjoyment of literary and dramatic selections; (e) free and independent reading in school or at home of current events, periodicals and books and selections for information or pleasure; and (f) group or individual instruction in the fundamental habits of silent and oral reading for pupils who are unable to read satisfactorily. Each of these types of reading activities will now be discussed briefly.

The study, or work, type of reading. Experience teaches that one of the major contributing causes of failure in junior and senior high schools is the inability of pupils to read textbooks with skill and intelligence. The recognition of this fact has led to the demand that the teacher of each subject understand clearly and pass on to her pupils those reading and study habits which capable workers in the respective fields must possess. Arrangements have been made in many junior high schools to emphasize systematically in English classes various important habits27 of silent reading, such as "varying the rate of silent reading in accordance with the reader's purpose and the nature of the selections," "looking for the author's central idea and leading divisions." "making mental reviews, or taking backward looks during the reading," "contributing to the selection, or reading between the lines," and "finding special information, or locating particular passages." Such training should be supplemented, however, by instruction in habits of reading and study that are more or less peculiar to given subjects. Three examples follow:

1. To comprehend a principle or an explanation, such as a statement of the principle of refrigeration in a general science text, or the explanation given in a civics text of representation in the senate.

<sup>27</sup> Howard Copeland Hill and Rollo LaVerne Lyman, Reading and Living, Book One, pp. x-xiii. New York: Charles Scribner's Sons, 1924.
G. A. Yoakum, The Effect of a Single Reading. University of Iowa Studies, No. 77. Iowa City, Iowa: University of Iowa.

- 2. To understand a problem to be solved or a task to be done, such as grasping the essential conditions of a mathematics problem or of written or printed assignments in science.
- 3. To grasp the central idea in textbook material which is new to the reader, such as a detailed account of Burgoyne's Invasion in a history assignment.

As new problems in study or work-type reading are encountered, teachers should instruct pupils in the steps or processes which prove most effective. For example, in reading a mathematics problem the following procedure<sup>28</sup> may be recommended: A deliberate first reading in order to determine the essential conditions; a deliberate second reading, if necessary, to understand all of the facts and their essential relations; restating in one's own words what is given and what is found; recalling related processes needed for the solution of the problem; and a final rapid reading of the problem to secure the figures and facts that must be used in making the necessary calculations. Obviously, instruction concerning such matters and the necessary practice belong in mathematics classes.

Extensive or supplementary reading. The reading of reference books, periodicals, and newspapers to supplement the reading of textbooks is now considered a very important function of junior and senior high schools. This type of reading is highly important because it extends the experiences of pupils far beyond the limits of class discussions and intensive reading assignments. It quickens their thinking concerning numerous problems in a given field. It intensifies their interest in such problems and frequently leads to the discovery of vocational or professional interests. In the field of the social sciences, extensive reading acquaints pupils with many dominant social problems and tendencies that could not otherwise be so clearly recognized. Many schools encourage extensive reading by providing working libraries in each classroom which may be used freely during reading or study periods.

An analysis of school practises in making supplementary assignments reveals at least three important purposes of such reading:

1. To secure definite information on specific points assigned or questions asked, as, for example, reading rapidly a chapter of Jane

<sup>&</sup>lt;sup>28</sup> Paul W. Terry, How Numerals Are Read Supplementary Educational Monographs, No. 18. Chicago: Department of Education, University of Chicago, 1922.

Addams' Twenty Years in Hull House to find answers to a few assigned questions.

- 2. To find new or additional information upon a topic or problem under consideration, as, for example, reading Enos Mills' The Story of a Thousand-Year Pine to secure new and valuable ideas about the preservation of forests.
- 3. To secure new points of view and new outlooks upon life, as for example, the reading of Hamlin Garland's Son of the Middle Border to learn of pioneer life on the American frontier of 1850-70; or the reading of Ramona to learn Helen Hunt Jackson's interpretation of the treatment of California Indians.

Every teacher who leads pupils into paralleling, contrasting, or enriching intellectual experiences through reading books or selections outside of textbooks should appreciate fully, and lead her pupils to a clear understanding of, the difference between extensive and intensive reading. For example, in contrast to the technique employed in reading a mathematics problem, the following steps may prove effective in wide reading to secure new points of view or new outlook upon life: a fluent single reading largely to comprehend the story; finding and following the author's main theme; comparing and contrasting with ideas already in mind; estimating the value or significance of statements; possibly a slower re-reading of parts which seem to have special significance; a final mental summary of main contributions and supporting data.

The reading and enjoyment of literature. The term "literature" is here used to indicate materials which are characterized by their literary excellence, primarily the materials of the literature class. The fact is clearly recognized that texts and informational reading books are different in kind, both as to form and as to content, from belles lettres. The point of view is taken in this report (Ch. VI) that reading of belles lettres at the junior-high-school level ought to depart widely from analytical study and to provide for extensive reading and the gaining of rich experience. In this connection extensive library assignments and wide individual reading are essential. The junior high school may wisely stress the value of literature as experience and acquaint pupils with the sources of interesting, wholesome reading materials, reserving for the senior high school, and still better for the university, emphasis on literary or artistic values.

An analysis of the experience of junior-high-school pupils with "literature" reveals at least three prominent purposes of reading that merit careful consideration in a program of instruction. In connection with each pupils should be trained to adopt reading procedures appropriate to each situation.

- 1. To read rapidly in order to enjoy the action and events of a story, as, for example, Irving's Rip Van Winkle or Mark Twain's Huckleberry Finn.
- 2. To understand and interpret characters, as, for example, the hero in Eliot's Silas Marner or in Browning's An Incident of the French Camp.
- 3. To read aloud in order to enjoy certain selections more fully, as, for example, Browning's How We Brought the Good News or Riley's The Circus-Day Parade.

The purpose and procedure in teaching literature in senior high schools are very similar for the most part to those recommended by junior high schools. Brief reference is made here to some of the differences. The selections which are read in senior high schools require more enrichment through a clearer realization of the author's purposes and of the times and conditions under which they were written. Skilful teaching requires restraint and an artistic power of presentation or of direction in study by the teacher. The books, too, require of the reader discovery of the central theme, purpose, or idea of the whole. This does not mean, however, that a long or wearisome time should be given to the study of a given book. In the last year a systematic course in English literature is appropriate. In this connection students who plan to go to college may be given an introduction to literary analysis. The fact should be remembered, however, that the chief function of literature is to enrich experience and to contribute to a fuller understanding of life.

Free and independent reading. Obviously, the ultimate use of reading made by cultivated and skilled people is the perusal of materials which fall in line with their occupational and recreational interests. Such reading may be characterized, in general, by the adjectives free and independent. Studies of popular reading of this category unfortunately reveal tastes for the cheapest of insincere and trivial stories. The inability or unwillingness of most adults to enrich their minds with worthy reading is proverbial. While it is certain that the junior high school may accomplish much by

intelligent guidance in supplementary reading, it is increasingly evident that reasonably guided library experience ought to be considered as somewhat apart from, and in addition to, the reading experiences that are commonly associated with class work.

With these facts in mind, progressive schools should equip themselves with extensive libraries in charge of trained librarians and should devote a substantial part of their English time to library reading. They should also organize "reading groups" of boys and girls of similar tastes and abilities, which are supervised by teachers who sympathetically keep in touch with, and direct the reading choices of, their respective groups. Furthermore, each teacher of a content subject should provide pupils with lists of interesting books in their respective fields and should stimulate interest in reading them. English teachers ought to make a special point of cultivating interest in, and intelligent use of, newspapers and periodicals and of acquainting pupils with the sources and values of various types of reading materials. The co-operation of the home should be secured in developing habits of independent reading.

There is danger that schools may inaugurate so many activities that the average or inferior pupils, overwhelmed and embarrassed, may accomplish nothing well. Every effort should be made to direct the activities of such pupils, to the end that they do not undertake too much. On the other hand, it is just as important that adequate provision be made for pupils of superior ability, who are too often engaged with relatively simple assignments, almost never exerting their full capacities. All junior- and senior-high-school pupils should be directed into wisely supervised library activities, each pupil developing along the lines of his greatest interest and in harmony with his capacity. Very wide provision for the unusually capable pupils is quite as essential in a program of instruction as the diagnostic and remedial work recommended for those who encounter serious difficulties in reading.

Expressive oral reading. There are frequent occasions when pupils should read aloud to others—for example, in presenting an original report, in citing evidence in support of a view expressed in class discussion, or in participating in recreational reading of literary selections, particularly poetry and drama. Although this type of

reading is far less important than intelligent silent reading, the position taken in this report is that pupils should be trained to read to others effectively. A clear distinction should be made, however, between training pupils to read well and preparing them for expert service as public readers or elocutionists. Only a relatively small number of junior- and senior-high-school pupils have the capacity or need for intensive training of the latter type. Furthermore, many pupils are unable to attain even a satisfactory level of accomplishment without the expenditure of much time and energy. Individual differences in capacity must be recognized and the requirements modified according to needs and accomplishments in all phases of school work.

Provision for the direction of reading activities. Unless a program of instruction is carefully organized, there is danger that there will be little or no expert direction of reading activities in junior and senior high schools. At the risk of some repetition, the discussion which follows describes a natural division of such responsibilities:

Teachers of each subject that requires reading. Each teacher who makes reading assignments is responsible for the direction and supervision of the reading and study activities that are involved. This includes careful directions concerning the preparation of materials assigned to be read, discussions of the best procedures to follow in activities that involve reading, special emphasis on reading and study habits that are peculiar to a given subject, continuous efforts to determine the accomplishments and difficulties of pupils, and the provision of help for the pupils who need it. They should also provide opportunities for extensive reading of assigned or suggested references, including newspapers and periodicals, and should assume responsibility for supervising such activities. In this connection it is necessary for them to keep in touch with new reading materials in their fields and to recommend at frequent intervals that appropriate reading materials be added to the library collection.

Teachers of each subject should feel responsible for supervising whatever oral reading is essential in the activities of their classes. Definite preparation should be required, if necessary, and high standards of performance maintained. In connection with these activities, each teacher should make continuous studies of the reading needs of the members of her classes and should refer pupils

who are noticeably weak in silent or oral reading to the special teacher of reading, to whom reference will be made later.

In organizing classes in any subject in which a large amount of reading is required, the fact should be remembered that some pupils read much more rapidly and effectively than others. Experience teaches that superior pupils do far more work in a given period of time and interpret more intelligently and critically what they read than do normal or inferior pupils. It is essential, therefore, that provision be made for special assignments for, and individual work with, inferior pupils and for enriched reading experiences for superior pupils.

Teachers of literature. Teachers of literature, as well as teachers of other subjects, are responsible for skilfully directing the reading activities of pupils in their classes. This includes training in appropriate reading procedures, checking the accomplishments and needs of pupils, providing group and individual help when needed, and referring to the remedial teacher pupils who reveal gross defects in fundamental reading habits. Teachers of literature are peculiarly responsible for stimulating keen interest in recreational reading, for refining reading interests and tastes, for training pupils in the sources and values of different types of reading material, and for developing appropriate standards for use in selecting materials to read. Special studies should be made of newspapers and magazines and continuous effort exerted to establish the habit of reading them regularly and intelligently. Furthermore, teachers of literature, particularly of poetry and the drama, should assume responsibility for the improvement of habits of expressive oral reading when it is essential to the interpretation and enjoyment of the selections read.

Special teachers of reading. All junior high schools and most senior high schools should have on their faculties one or more expert teachers qualified to give specific training in habits of silent and oral reading. Inventories should be made at frequent intervals of the reading accomplishments and needs of pupils. All who fall noticeably below the sixth-grade standards should be given instruction in reading during a special training period until a satisfactory level of accomplishment has been reached. Furthermore, all pupils who encounter unusual difficulties in reading should be referred to the special teacher for diagnosis and remedial treatment. Unless some such provision is made for correcting fundamental

defects, there is grave danger that the difficulties which these pupils encounter will never be corrected and that they will be seriously handicapped in all school activities that require reading.

The librarian. The librarian is responsible first of all for providing the books and selections to which the pupils are referred in the various classes. She should also aid the members of the faculty in securing new books relating to their respective fields as soon as they are published. She should keep records of the withdrawals of books by individual pupils and from time to time should make studies of the amount and character of their reading. The information secured through such studies should be referred to the appropriate teachers with suggestions concerning types of material in which the pupil should be interested. She should also endeavor to extend the reading interests of these pupils by acquainting them with new and interesting books and to modify their tastes where such changes are desirable through suggestions offered in individual conferences. Finally, she should observe continuously the reading habits of pupils, make specific suggestions to individual pupils. and refer to the reading teacher those who give evidence of serious difficulties.

### CHAPTER IV

# THE DEVELOPMENT OF A MEANINGFUL VOCABULARY AND OF INDEPENDENCE IN WORD RECOGNITION

Purpose of this chapter. This section of the report deals, first, with the development of a rich meaning vocabulary and the initial association of spoken words with their written symbols. This is followed by a discussion of methods of word analysis and of the place of phonetic analysis in word recognition. The chapter concludes with the outline of a program embodying the principles and practices discussed. The relation of words to the complete reading process is emphasized throughout.

The place of word recognition in the reading process. The reader must recognize words and must fit them into the meaning of his text. This means instantaneous recognition of known words and groups of words and effective habits of independent attack in dealing with unknown words.

Certain facts concerning the process of recognition have been clearly established, notably by the experimental work of Judd, Buswell,¹ Gates,² and others. For example, the mere "word caller" is not a good reader from the standpoint of comprehension. Furthermore, the reader who does comprehend effectively usually grasps words and groups of words quickly; his interpretation of the thought is not interrupted by struggles with word forms; slight cues are sufficient to set off word recognition. To the "word caller" the recognition of words is an end in itself and is often accomplished with little or no regard for meaning; to the good reader the word is a symbol through which he grasps meaning.

The pupil who has word difficulties, either of meaning or of pronunciation, is to that extent handicapped in his reading possibilities. The teacher of reading in every grade may encounter pupils whose ability in word recognition varies all the way from the zero limit of the beginner to the skill of the good reader whose limitations are

<sup>&</sup>lt;sup>1</sup> Guy Thomas Buswell, Fundamental Reading Habits: A Study of Their Development, Ch. III. Supplementary Education Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

<sup>&</sup>lt;sup>2</sup> Arthur I. Gates, The Psychology of Reading and Spelling with Special Reference to Disability. Teachers College. Contributions to Education, No. 129. New York: Teachers College, Columbia University, 1922.

felt only in certain new words and idioms which he is adding to his vocabulary. Whatever the stage of development of the individual pupil, the teacher must endeavor to improve his recognition of words as symbols of meaning. He must learn to perceive words accurately and to recognize them quickly. Because of its greater importance, attention is directed first to the problem of developing meaningful association with words.

### DEVELOPMENT OF A RICH MEANING VOCABULARY

Relation of vocabulary to total reading process. In all assimilative reading, grasp of content depends upon the associations made as the words are seen. When associations are definite and numerous, the results are rich; when associations are hazy and few in number the results are vague. Dewey' says: "To grasp . . . a word in its meaning is to perform an act of intelligent selection or analysis." Growth in reading power means, therefore, continuous enriching and enlarging of the reading vocabulary and increasing clarity of discrimination in appreciation of word values.<sup>5</sup>

Need for definite vocabulary training. All enrichment of experience, both within and without the school, has a direct influence upon the reading vocabulary. Valuable as is this source of growth. the school must supplement it with very definite training in order to insure rapid growth. There must be conscious selection of experiences which are valuable for pupils, the choice of words to associate with these experiences, and thorough training in the use of this vocabulary. Provision must be made for the measurement of progress and for individual needs. This is a common problem for all the teachers who are dealing with a single group of children

<sup>8</sup> S. S. Brooks, Improving Schools by Standardized Tests: pp. 146-147. Boston: Houghton Mifflin Co., 1922.

Clarence T. Gray, Deficiences in Reading Ability, Chapters IV. V. VI. XXII. Boston: D. C. Heath and Co., 1922.

<sup>4</sup> John Dewey, How We Think. P. 180. Boston: D. C. Heath and Co., 1910.

<sup>5</sup> S. H. Clark, Interpretation of the Printed Page. Ch. XIV. Chicago:

Row, Peterson and Co., 1915.

J. B. Kerfoot, How to Read. Ch. I. Boston: Houghton Mifflin Co., 1916.

Sterling A. Leonard, Essential Principles of Teaching Reading and Literature. Ch. VI. Philadelphia: J. B. Lippincott Co., 1922.

Edward L. Thorndike, "Reading as reasoning; a study of mistakes in paragraph reading." The Journal of Educational Psychology, 8 (June, 1917).

and may well be studied in all schools organized upon a platoon or departmental basis. Chapter III and Chapter V discuss vocabulary enrichment for the younger pupils and in the content subjects respectively.

Vocabulary training must consist of a coherent, progressive program of work, based upon careful studies which have been made and which lead to further investigation. In many schools at present it is a haphazard day-by-day attack on new words without regard to the relative importance of words or to the laws of learning, the use of which leads to permanent retention. But when treated intelligently, the right type of training reacts upon every phase of school activity.

Selection of vocabularies for training. Frequency of occurrence is one measure of the importance of a word. The frequency may be determined from general reading vocabularies, such as those given in Chapter VII of this report or the Thorndike word list, or from the reading vocabularies for specific grades or specific subjects, as in the Winnetka and the Pressey studies. Just as our teaching of spelling has been improved by directing attention to the words most frequently needed in writing vocabularies, so our development of reading vocabularies will be strengthened by following the same principle of selection. To the extent that teachers' manuals make use of this principle, they are safe guides to follow in selecting words, word elements, and groups of words for drill purposes. So, too, in the higher grades it is necessary to provide experiences which will familiarize pupils with the meanings of the specialized vocabularies pertaining to the given subjects.

The relation of a given word to a given context is another measure of word importance. It is possible for a specific word to need extended explanation in a certain connection although its

<sup>&</sup>lt;sup>6</sup> F. M. McMurry, How to Study. Ch. V. Boston: Houghton Mifflin Co., 1909.

<sup>&</sup>lt;sup>7</sup> E. L. Thorndike, *The Teacher's Word Book*. Teachers College, Columbia University, New York City, 1921.

<sup>&</sup>lt;sup>8</sup> Mabel Vogel, Emma Jaycox, and Carleton W. Washburn, "A basic list of phonics for Grades I and II," Elementary School Journal, 23 (February, 1923), 436-443.

<sup>&</sup>lt;sup>9</sup> L. C. Pressey, "An investigation of the technical vocabularies of the school subjects," Educational Research Bulletin (April 30, 1924). Columbus: Ohio State University. (Lists from Public School Publishing Company, Bloomington, Illinois.)

general use by the pupils will be infrequent. Care should be taken, however, that unusual words which influence the meaning only slightly do not receive undue attention. The general maturity of pupils is a factor to consider in this connection.

Attention to vocabulary when dealing with context. Both the value of a word and its general meaning depend upon the context in which it is found and the purpose with which the context is being read. Interpretation of the context meaning and the carrying out of the specific reading purpose both involve discussion of the text. During this discussion attention to the vocabulary of the reading material occurs naturally; both the meaning and the importance of individual words are determined by their relations to the total situation. Because this treatment is so much more valuable, the practice of listing the hard words of a lesson and drilling upon them is rapidly falling into disrepute.

While dealing with the description of a storm, pupils found all words and expressions which referred to the wind, the rain, the thunder, and the lightning. Words which dealt with these subjects were recognized readily, although many of them would have been considered hard if met in lists. Comparison of the Cratchit's celebration of Christmas with our own, as to the dinner, the games, and other festivities, brought ready handling of the vocabulary involved.

Whenever the study of a character, the unraveling of a complex situation, or the appreciation of a word picture forms the nucleus for discussion, attention should be given to specific words, idioms, and groups of words. An excellent use of synonyms is possible here, by having a pupil ask the class for a synonym, or synonymous expression, for an unknown word. At times, an illustrative sentence may clarify the meaning.

Gradual refinement of word meaning. Words differ greatly among themselves as to the shades of meaning which they convey in different contexts. The same word may also have many meanings. The associations with a given word may vary from one given by frequent or striking usage to those which are made very occasionally. The

<sup>10</sup> Edward L. Thorndike, "Reading as reasoning: a study of mistakes in paragraph reading." The Journal of Educational Psychology, 8 (June, 1917).

<sup>&</sup>lt;sup>11</sup> Clarence R. Stone, Silent and Oral Reading. Pp. 193-203. Boston: Houghton Mifflin Co., 1922.

dictionary definitions are applicable to the word under varying conditions and are often difficult for children to understand; therefore, methods must be found to strengthen valuable associations in less complex ways than by reference to definitions. Exercises which call attention to words of opposite meaning, to words belonging to a common classification, or to words having related meaning, are valuable in this connection. In some texts simplified vocabularies are arranged in alphabetical order as little dictionaries, and synonyms or explanations take the place of formal definitions. These should be referred to incidentally in clearing up meaning difficulties. Eventually, the use of the dictionary will be taught and pupils trained to use it with judgment when dealing with essential words.

The idiomatic use of certain common words or word endings often proves puzzling to children. Words which give a negative point of view or limit the thought in unexpected ways need especial attention: not only, if, unless, but meaning except are examples.

Standards for judging vocabulary growth. The standard tests devised for testing pupils' vocabularies should have wider use. For an account of them see Chapter IX. Informal tests should be devised by the teacher. Children should learn that to enlarge one's vocabulary is a desirable form of growth, that the person with a large vocabulary for ready use is better able "to command what he wants."

# INITIAL ASSOCIATION OF SPOKEN WORDS WITH THEIR WRITTEN SYMBOLS

Presentation of words to beginners. The beginner in reading already has a speaking vocabulary in keeping with his experiences. Chapter III stresses the need for rich experiences associated with an appropriate vocabulary before the reading process is attempted. A pupil learns to read by learning to recognize the written or printed symbols that stand for the spoken words which he knows. Early work in reading must be strongly motivated, so that it seems worth while to the child to make the association between the known spoken word and its unknown symbol. Skilful teaching must provide much repetition, for only through repeated associations of meaning with symbol does the child learn the unknown symbol. The fact is widely recognized that the early lessons must deal with words

and word groups as units until the meaningful associations have been definitely established. Directness of association between the printed symbol and the appropriate meaning, as well as pleasurable feeling, assure rich returns from work of this type.

Marked advance12 has been made in recent years in discovering those situations in the young child's experience in which the reading of words or word groups will be of greatest interest and value. For example, action words are connected with his common activities: run, jump, hop. Color words are used to label crayon boxes: red, yellow, bluc. Signs are made for his projects: grocery, market, street car. Pictures of common objects are associated with their names: house, chair, dishes. Labels are put upon objects in the room: door, desk, picture.

The number of repetitions needed to make certain the recognition of a word varies with the intelligence and stage of development of the individual child 13 The present tendency to test children early in the first grade and to group them according to the results of such tests, helps the teacher to know what to expect of individual children. The habit of certainty in word recognition should be cultivated from the first. The frequent recurrence of concrete situations involving the use of given words or groups of words is the most valuable basis for repetition. New words which are to be mastered should be presented to children who learn slowly, only as rapidly as they can learn them well. With such children incomplete learning consisting of hazy and indefinite associations should be avoided.

Wide variation exists in practice as to the number of words which are taught in this way before children begin to use books. The tendency seems to be toward increasing the number so learned.

<sup>12</sup> Patty Smith Hill and others, A Conduct Curriculum for the Kinder-

garten and First Grade. New York: Charles Scribner's Sons, 1923.

Annie E. Moore, "The Use of Children's Initiative in Beginning Reading," Teachers College Record, 17 (Sept., 1916) pp. 330-343. Teachers College, Columbia University, New York City.

Mary E. Pennell and Alice M. Cusack, How to Teach Reading. Bos-

ton: Houghton Mifflin Co., 1923.

<sup>13</sup> S. S. Brooks, Improving Schools through Standardized Tests. Pp. 162-164, 191. Boston: Houghton Mifflin Co., 1922.

Samuel Chester Parker, How to Teach Beginning Reading. P. 4. Boston: Ginn and Co.

Emma Watkins, How to Teach Silent Reading to Beginners. Chs. IV and V. Philadelphia: J. B. Lippincott Co., 1922.

A low estimate is fifty. The average for first-grade classes in one city is about eighty.

### METHODS OF WORD ANALYSIS

First impression of printed symbols. The discussion thus far has related to the development of meaningful associations with printed symbols. Attention is directed next to more detailed processes involved in word recognition. At first, the child gets only a confused mass of sense impressions from the printed page. The teacher should realize how disorganized these impressions are and should emphasize significant details in efforts to make them clear and distinct. Teachers' manuals usually indicate the specific words and word elements to which attention should be directed.

As the known details increase in number, the mass of indistinct sense impressions becomes an orderly arrangement of known words and groups of words. This is clearly shown by the studies of eyemovement which reveal numerous "periods of confusion" in the early reading and the gradual disappearance of word difficulties later.

Distinct sense impressions essential. Accuracy in the perception of words depends first of all on distinct sense impressions. This distinctness hinges upon sense organs being in normal condition. Eye, ear, and speech defects must be overcome in order to secure satisfactory results. Reading difficulties in any grade may be due either to defective sense organs or to inadequate training in word recognition. The remedy in the latter case lies in the building up of a carefully selected vocabulary within the limits of the pupil's ability.

The discovery of units of analysis. The word is a natural unit in reading because pupils are using words constantly to express ideas in oral language. Smaller units of analysis—sounds, letters, syllables—do not have this close association with ideas. Gradually, pupils become aware of likenesses and differences in the written or printed words which they are learning. These likenesses and differences may relate either to sound or to form. Initial sounds, notably s, f, l, or rhyming words, catch the ear, so that the child says: "Sit sounds like sing, hen sounds like pen." Or capital letters catch the eye and the child says: "I know Jack when I see this," pointing to the J. The teacher takes advantage of this awareness

of similarities and differences and builds upon it. An intelligent pupil finds real joy in applying the newly discovered units when meeting unknown words.

Strangely enough, maturity in reading seems to reverse this process. Practice in associating known words with the process of interpretation, which is true reading, increases ability to get words from the context and to perceive groups of words. Slight cues eventually suffice to connect the printed page with the flow of thought. As Huey says: "Indeed, hundreds of phrases and sentences have occurred so often in our speech that they have a place in mind as specific memory-wholes; and as slight a glimpse is needed to start the recognition of these as when the tap of a cane suffices to announce the approach of our grandfather."14

The earlier studies of perception in reading were made with adults by means of the tachistoscope. Only recently have research workers<sup>15</sup> turned their attention to perception in reading as related to the beginner and to remedial cases. Both of these are promising fields and the results will undoubtedly give certainty to our methods of teaching by settling on a scientific basis controversial points which are at present argued on a basis of opinion and of limited experience.

Analysis by visual likenesses and differences. This method is more valuable than many teachers realize. It is used when a pupil is thated to match words and groups of words or to distinguish between words which look very nearly alike. Teachers often note that recognition of words is influenced by their relative length, their general shape,

<sup>14</sup> Edmund B. Huey, The Psychology and Pedagogy of Reading. P. 143. New York: Macmillan Co., 1908.

New York: Macminian Co., 1906.

15 Guy Thomas Buswell, Fundamental Reading Habits: A Study of Their Development. Ch. III. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922. Arthur I. Gates, The Psychology of Reading and Spelling with Special Reference to Disability. Teachers College Contributions to Education, No. 129. New York: Teachers College, Columbia University, 1922.

Arthur I. Gates and Eloise Becker, "A study of initial stages in reading by preschool children," Teachers College Record, 24 (Nov., 1923), 180. 182

Leta Hollingworth, Special Talents and Defects. Pp. 58-61. New York: Macmillan Co., 1923.

<sup>16</sup> Arthur I. Gates, The Psychology of Reading and Spelling with Special Reference to Disability. Ch. V. Teachers College Contributions to Education, No. 129. New York: Teachers College, Columbia University, 1922.

and the dominating letters which they contain. The work of Gates<sup>16</sup> shows that "ability to perceive clearly the characteristic features of words" is an important factor in good reading. Just what this ability is and how it is to be trained we are not certain. Periods of confusion in eye-movements indicate that the eye is evidently seeking for familiar elements in the word.<sup>17</sup> Not all of the parts need to be known. From those which are known and the ideas gained through a study of the context, the pupil builds up the word whole.

Recognition of larger wholes in polysyllabic words. The larger the known whole which the eye perceives, the more economical is the attack, provided the unit which is perceived has an integral relation to the word under survey: to see basket in basketfuls or consider in consideration would be better than to see bask in basketfuls or side in consideration. Unless the words basket and consider were in the pupil's reading vocabulary, the longer words would not be analyzed. Flash drills following detailed analysis help in developing independence in the recognition of the larger whole.

Recognition of common groups of words. Economy in word recognition is not reached until the reader habitually sees words in groups. This ability comes to the good reader without special training, but training is essential for the average and the slow readers. Flash phrasing should not deal with words when a pupil has reached the stage where the eye is reaching ahead for longer units. Drills on groups of words are provided with flash cards and by manuals which accompany most modern primary readers. With older pupils exercises may be given in dividing reading material into thought groups, in underlining well-known groups of words, and in selecting groups of words which are important from the standpoint of neaning.

Selection of elements for drill. Just as the modern attack upon a vord comes first in context, so words for drill are selected after the leed for it on a given word is evident. Three factors determine the election of words for drill: (a) frequent need for the word in daily

<sup>17</sup> Edmund B. Huey, The Psychology and Pedagogy of Reading. Ch. V. New York: Macmillan Co., 1908.

Charles H. Judd, Reading: Its Nature and Development. Pp. 112-118. upplementary Educational Monographs, Vol. II, No. 4. Chicago: Deartment of Education, University of Chicago, 1918.

reading activities, (b) the difficulties which given words present to individual pupils, and (c) the economy with which words related because of striking similarities or differences may be given. There is no excuse for drilling upon a word which pupils seldom meet or one which they know without hesitation. Analysis should be subordinated to the recognition of the word as a whole. It is wasteful to see words in parts except when analysis is necessary for recognition; the word whole must be recognized again and again after analysis has taken place. To continue analyzing the same word is futile. 18

Decisions as to the immediate importance of a given word for individual pupils or a class rest with the teacher. She must be certain that time and energy are directed to essentials. No haphazard selection will produce results; necessary studies should be made to determine the frequency in the pupils' reading experience of words causing difficulty. The teacher should make use of the studies reported in Chapter VII and Chapter X in this connection.

The technique of drill. Modern psychology has discovered very definite laws for acquiring habits. 19 All drills should be given in harmony with these laws. Parker summarizes the principles of effective drill as follows:

- 1. Only correct practice makes perfect; therefore,
  - a. Delay drill until a correct start is assured.
    b. Always subordinate speed to accuracy.
- 2. Avoid wasting time on non-essential and accessory processes.
- 3. Secure zeal, interest, and concentration of attention with short, snappy, interesting, and varied drill.
- 4. Use ready-made drill systems.
- 5. Continue drill until automatic responses are secured.

Fatigue develops rapidly in drill periods because of the strain of

<sup>18</sup> Arthur I. Gates, The Psychology of Reading and Spelling with Special Reference to Disability. Pp. 20-48, 89-91. Teachers College. Contributions to Education, No. 129. New York: Teachers College, Columbia University, 1922.

<sup>19</sup> Samuel Chester Parker, General Methods of Teaching in Elemen-

tary Schools. Pp. 247-268. Boston: Ginn and Co.

Mary E. Pennell and Alice M. Cusack, How to Teach Reading. Boston: Houghton Mifflin Co., 1923.

ton: Houghton Mifflin Co., 1923.

Arthur I. Gates, Psychology for Students of Education, Ch. X. New York: Macmillan Co., 1923.

Frances Jenkins, Reading in the Primary Grades, Ch. IV. Boston: Houghton Mifflin Co., 1914.

William Henry Pyle, Psychological Principles Applied to Teaching. Baltimore: Warwick and York, Inc., 1924.

concentration. A maximal length of ten minutes for drill periods is therefore recommended.

Training in economical habits of attack on words. Emphasis on motivation and thought-getting may blind the eyes of some teachers to the necessity of training pupils in economical habits of word attack. As a result, ineffective habits may be developed. The present emphasis upon silent reading makes necessary a word of warning here. Unless there is constant checking of the thought obtained, some rapid readers may get into the habit of skipping unknown words or of giving them almost any meaning in order to proceed with the reading. An unknown word presents a challenge; children should be trained to respond effectively to that challenge when the word is important.

The complex nature of reading habits should lead to careful balancing of one habit against another. For example, care should be taken that the habit of discovering known parts in the middle or at the end of words does not interfere with the habit of attacking the word at the beginning and working through to the end.

The teacher should be certain that the following habits are well established:

- 1. The habit of attacking an unknown word and working it out independently.
- 2. The habit of trying to fit a word into the context.
- 3. The habit of seeing a word as a unit made up of known parts.
- 4. The habit of using tools gained in training in analysis.

Clear perception of known word groups by means of rapid eyemovements and brief fixation periods, the whole being subordinated to thought mastery, is the final end to be attained. The unknown word will always be met, with greater or less frequency, during the process. To recognize that it is unknown is essential. To have such habits of attack that its recognition is mastered economically will give the reader the needed independence in the handling of words. Valuable as are the methods of analysis that have been described, they are supplemented in most schools by the use of phonetics. Attention is therefore directed next to a discussion of the place of phonetics in word recognition.

THE PLACE OF PHONETIC ANALYSIS IN WORD RECOGNITION Controversial questions. Conflicting opinions regarding the place of phonetic training have prevailed for many years. The main con-

troversy is: should phonetic training hold a place of primary or secondary importance in the teaching of reading? Certain claims and assumptions are made which need careful examination. To help clarify these issues a few such points will be mentioned briefly.

- 1. The value of definite phonetic methods is magnified when compared with the results of poorly organized teaching.
- 2. Unsupported claims are made as to superiority of one phonetic method over another.
- 3. The assumption is made that, since a word is composed of phonetic elements, it can be taught most easily through phonetics.
- 4. Untrained administrators can see results in word calling, even when they do not understand the complexities of the reading process.
- 5. Untrained teachers can be trained more easily to teach word-calling than to teach thought-getting.
- 6. The commercial aspect unfortunately at times seems to overshadow the educational.

There is abundant evidence that phonetic training has some values. Controlled experiments will make these values clear. Assumptions which cannot be supported, in time, with clear evidence, should disappear from professional discussion.

Present status of scientific investigations. A comprehensive report covering such investigations as have been published in this field has recently been prepared by William S. Gray. Attention is called in the report to the fact that many of the results of these studies are unreliable because the conditions under which the experiments were conducted were not controlled. Therefore, differences in the results are frequently due to differences in the capacity of pupils to learn, in the skill of teachers or in other varying conditions.

The need of developing effective habits of word recognition is shown in studies reported by Judd, 20 Buswell, 21 and Gates, 22 Unless

<sup>&</sup>lt;sup>20</sup> Charles H. Judd, Reading: Its Nature and Development, pp. 58-65. Supplementary Educational Monographs, Vol. II, No. 4. Chicago: Department of Education, University of Chicago, 1918.

<sup>&</sup>lt;sup>21</sup> Guy Thomas Buswell, Fundamental Reading Habits: A Study of Their Development. Chapters 1 and 3. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922.

<sup>&</sup>lt;sup>32</sup> Arthur I. Gates, The Psychology of Reading and Spelling with Special Reference to Disability. Chs. V. and VI. Teachers College. Contributions to Education, No. 129, New York: Teachers College, Columbia University, 1922.

such habits are developed, the reader is seriously handicapped when meeting unknown words. Phonetic analysis is one type of training which builds up desirable habits.

Children differ in their reaction to phonetic training. Some acquire independence in word recognition with little or no formal training. Other children need a larger amount of training to render them independent. Still others are more or less helpless even after they have had considerable training. The lesson which these facts teach is that phonetic training should be provided according to the needs of individual pupils. Tests are needed which will aid teachers in determining the amount and kind of training that individual pupils need in order to render them independent in word recognition.

Needed scientific investigations in the field of phonetics have been summarized as follows:

A comprehensive study of the frequency of occurrence of all important phonetic elements and of the various combinations in which they occur, based on a word list which shows the frequency of words in common use in primary reading materials; the difficulties presented in teaching various elements; the relative merits of different elements and combinations in unlocking words; the time at which different elements and combinations of elements should be introduced; the amount of training which different types of pupils need; conditions under which training can be introduced to best advantage; the methods most effective in group instruction and with different types of individuals.

A study of present tendencies. The selection of phonetic elements upon the basis of children's needs is a problem for each community. The most common practice is to use a basic series of readers, limiting the phonetic training to the lists given in the accompanying manual. A more recent tendency<sup>23</sup> is to analyze the total reading experiences of the children and to discover the most needed elements as shown by their frequencies. Until more scientific analyses can be obtained, the method of consensus of opinion may be of help. The following summary of a study<sup>24</sup> showing general tendencies is presented as the most comprehensive in this field.

<sup>23</sup> Mabel Vogel, Emma Jaycox and Carleton W. Washburne, "A basic list of phonics for Grades I and II." Elementary School Journal, 23 (February 1923), pp. 436-443.

<sup>(</sup>February, 1923), pp. 436-443.

24 Mabel Lucile Ducker, The Present Status of the Teaching of Phonics as Shown by an Analysis of Eighteen Reading Manuals. Unpublished Master's thesis, Department of Education, University of Chicago, 1920.

The investigation consists of an analysis of eighteen well-known, widely-used reading manuals published since 1900. The analysis was made in order to determine the essential features of the phonetic training included in a majority of the manuals.

### GENERAL CONCLUSIONS

- I. Phonics aim principally to train in the mechanics of reading. By mechanics of reading we mean independent power over word problems gained through automatic association of sound and symbol and used for the purpose of interpreting the meaning of the printed page.
- II. Only a few systems give no preliminary training before beginning formal phonic work.
- III. A large majority of phonic systems postpone the time for beginning formal phonics. The time varies widely from a few days to a month, or until the children have acquired a fifty or sixty sight-word vocabulary.
- IV. A large majority of phonic systems employ the analytic-synthetic method. They start with analysis of familiar words taken from sight vocabularies.

Most of the manuals do not introduce discritical marks until the third or fourth grade is reached, where the children are taught to use the dictionary.

- V. The elements common in two-thirds of the phonic systems are:
  - 1. The single consonants:
    - b, f, h, l, m, s, t, hard g, p, d, w, hard c, k, j, n, and r, which are introduced in the primer work.
    - Y and v. introduced in primer or first-reader work.
  - 2. The compound consonants:
    - sh, wh, ch, which are introduced in the primer work.
    - th. introduced in first-reader work.
  - The long and short vowel sounds are introduced either in primer or first-reader words.

The following common vowel combinations tend to be introduced during first-reader phonics: ea, ee, ay, ai, oa, aw, ir, oy, ow. ou. oo.

There is a tendency to teach vowel sounds in phonogram word endings rather than as separate phonic elements.

- Silent letters tend to be introduced farther along in the work rather than in beginning phonic work.
- 5. The phonograms or monosyllabic word endings used in word series are:

A: Introduced in primer work	at ill ack all an en and ell in og un	B: Introduced in first or second reader phonics	ed ent ig ind ing op ut aul ake eat es	ow uck um ad air op ate ced ine ong	ear est oy ump up ide ite one ust ight ish
	un		ıck	are	ace
			old	aw	

### 6. The suffixes:

-ing, -er, and -e, introduced in primer work; -ed, introduced more often in first-reader work.

# SUMMARY CRITIQUE OF CERTAIN UNDESIRABLE PRACTICES IN PHONETIC TRAINING

Phonetics badly taught may do more harm than good. Much of the current work in phonics has little to commend itself and much that might well be amended. Without delay pending further experimental evidence, the committee has summarized the points of criticism upon which all members are agreed:

- I. Objections of the teaching of phonetics are based on poor teaching methods. Failure to recognize that phonetic training is merely an aid to independent reading, rather than an end in itself, has led to much negative criticism.
- II. Overemphasis on phonic analysis and mere word recognition encourages the development of "word-callers." This prevents the forming of correct attitudes of thoughtful appreciation. Overemphasis also leads to over-learning; one never knows when desirable standards are reached. This results in great waste of time and effort. Overemphasis frequently results from the assumption that the phonetic attack is the only method of analysis which should be used. As a result, little or no training is given in other methods of word recognition.
- III. The premature introduction of phonetic training and the over-systematic early work frequently crowu out varied activities

needed for the all-round development of little children. Artificial means of holding attention must be used, as young children are not interested in the refinements of analysis. This premature emphasis leads to lack of systematic work later when the children are capable of more intensive training. The second and third grades are the period in which such training should be given.

- IV. Failure to relate phonetic training to actual reading situations is a serious fault. Words are introduced for phonetic drill without regard to reading vocabularies.
- V. Neglect of individual needs results in the same amount of training for all pupils. This provides, as a rule, too much for bright pupils and too little for those who learn slowly. The diagnostic and remedial attitude should be taken throughout. Each child's needs should be discovered and met. The test should be the ability of the individual pupil to use phonetics independently and successfully in attacks on unknown words which he encounters in his reading.
- VI. Standards for planning phonetic training. Pending the settlement of controversial points by scientific investigations, certain procedures should be carried out in every school system.
- 1. A definite system of training in phonetics should be adopted, this system to be carefully related to a rich reading program. The system should stress the functional use of phonetic elements in reading situations. The use of phonetic training in such situations should not interfere with thought-getting. Teachers should be trained to consider this system as a source of help to be used rationally.
- 2. No separate work in phonetics should be done until the child has established the habit of thought-getting, has a reasonable stock of sight words, and has begun to note freely gross similarities and differences in words.
- 3. All early work in phonetics should be very simple; it should deal with common familiar words and with phonetic elements needed by the children.
- 4. All phonetic training should deal with words as units; attention to elements should be secured by covering or underlining parts of the word. Whether the stress is on the initial or the final blend will depend upon the part giving the child difficulty.

- 5. The phonetic elements taught should be in accordance with the best known scholarship in the field of phonetics.
- 6. The habits taught should lead to accurate pronunciation and enunciation as well as ready recognition.
- 7. Reasonable results should be required. They should be determined by the children's knowledge of a minimal number of phonetic elements and by their use of these elements in actual reading situations.

# A SUGGESTED PROGRAM OF INSTRUCTION FOR DEVELOPING A MEANINGFUL VOCABULARY AND INDEPENDENCE IN WORD RECOGNITION

#### First Grade

- I. Steps in Developing a Meaning Vocabulary
- 1. Wide extension of experience, with care that new words are learned which fit these experiences.
- 2 Opportunity for repetition of new words in connection with additional interesting experiences.
- 3. Special care to use early the vocabulary of the primer in connection with discussions of pictures, games, and other activities.
- 4. Observations by the teacher to determine vague expressions for which definite vocabulary should be substituted
- 5. The elimination of difficulties as children attempt to use new words.

## II. Steps in Developing Accuracy in Word Recognition

- 1. Teaching as sight words a preliminary list of words already in the speaking vocabulary of the children.
- 2. Noting the gross similarities and differences in the form and sound of the words in the preliminary list to which children give spontaneous attention.
- 3. Introducing the use of a book when pupils have learned to think of reading as thought-getting and have a sufficient reading vocabulary to attack simple stories with confidence.
- 4. Beginning work in phonetics when pupils notice freely gross similarities and differences in the form and sounds of words. This usually occurs a few weeks after books are introduced.
- 5. Introducing definite work in phonetics, with special attention to individual needs as early as these can be discovered. Through this work pupils should master the phonetic assignment of the grade.

- 6. Attending early to words with which children encounter difficulty in pronunciation and enunciation and to other inaccurate speech habits.
- 7. Discovering early the pupils who need to work more slowly or more rapidly than others.

# III. Suggestions for Training in the Independent Use of Habits of Recognition

- 1. Train children to attack the lesson with questions in mind after looking at the pictures.
- 2. Limit attention at first to a single line or sentence by use of marker.
- 3. Learn the different ways in which children may attack each word.
- 4. Tell at once the word or words which you do not expect any child to get: e.g., "The first word in this line is now. The last word in this line is under."
- 5. Train children to work across the page, getting words independently if possible, asking for help only if necessary.
- 6. Be sure that they get words from context or from phonetic elements when possible without interrupting the thought.
- 7. Secure responses by action, drawing or oral reading to see that pupils subordinate the words to the thought.
- 8. Occasionally emphasize a few of the more important words by having pupils find them on the page in response to thoughtquestions: "Find the boy's name. Find the words which tell where he is taking the cows."
- 9. At a separate time give needed drills—phonetic elements, words, and groups of words being selected on the basis of (a) frequency with which they are needed and (b) specific needs of individual children. No phonetic elements are to be used in isolation; they are always to be given in well-known words.

### Second and Third Grades

## I. Steps in Extending a Meaning Vocabulary

- 1. Wide extension of vocabulary through experiences, with care that appropriate new words are learned to fit into experience. Arousing curiosity concerning new words which convey interesting meanings. Special attention to words and idioms significant in beginning number and geography.
- 2. Growth in expecting words met in context to fit into context and to be words which children themselves use or hear others use.
- 3. Growing knowledge of when to ask for help in interpreting the meaning of a word met in context.

- 4. Utilizing knowledge of synonyms in clarifying text difficulties. Children give words or groups of words which mean the same as those in the text. For example, the book uses a haughty maiden; the child supplies a proud girl.
- 5. Exercises in classifying words under general headings to call attention to certain elements of meaning: e.g., from a given list of words children arrange two lists, one containing the names of workers, the second containing the name of the work each does.
- 6. Informal and standard vocabulary tests to make certain that steady growth is being attained.

### II. Steps in Developing Accuracy in Word Recognition

- 1. Care that all children know common sight words, e.g., when, because, among. Needed drills to be given preferably with groups of words on the basis of individual needs.
- 2. Emphasis on training in phonetics according to a definite system, with sensible standards for measuring results. This work to be intensive and given to small groups selected on the basis of need.
- 3. Care that phonetics are used when needed in unlocking new words in context.
- 4. Exercises in arranging short lists of words alphabetically as to initial letters or in groups according to common phonetic elements.
- 5. Constant attention to specific words on which children need careful training in pronunciation and enunciation, and to special children whose speech habits indicate need of remedial treatment.
- Early discovery of pupils whose classification needs to be changed in order to provide help in harmony with individual needs.

## III. Suggestions for Training in the Independent Use of Habits of Recognition

- 1. Train children to attack the lesson with questions in mind after looking at the pictures. This arouses ideas which may recall many words to be met in the context.
- 2. Limit attention to a short unit, i. e., a sentence or short paragraph.
- 3. Know the different ways in which children may attack each word.
- 4. Know the different values of each word in relation both to context and to pupil's habits of recognition.
- 5. Train children to work rapidly through the unit assigned, getting words independently if possible, asking for help only if necessary.

- 6. Tell promptly, even anticipating difficulty, unimportant words which pupils cannot be expected to know.
- 7. Help children to use knowledge of context or phonetic skills if they ask for help with words which they might work out independently.
- 8. Secure final responses by action, drawing or oral reading to see that pupils integrate the thought as conveyed in the assigned unit.
- 9. Have children point to specific words or groups of words on page in response to questions regarding meaning, c.g., "Who is this man? Why is he lifting the stone?"

#### Fourth, Fifth, and Sixth Grades

### I. Steps in Extending a Meaning Vocabulary

- 1. Rapid growth of vocabulary through actual experience and wide reading. Special attention to words and idioms significant in arithmetic, geography, and other content studies. Arousing interest in new words as suggesting new ideas.
- 2. Training in expecting words met in context to fit into context and to be words which children themselves use or hear others use. Inculcating good habits in asking for help with words. Gradual use of vocabulary helps and dictionaries introduced. Proper subordination of words to main ideas in context. The dictionary is to be used mainly for pronunciation, seldom for definition
- 3. Continued work with synonyms, children asking for synonyms when difficult words are found in context, also giving words or groups of words which mean the same as those in the text: for example, the book uses in expectation of conquests; the pupil supplies ready for victory.
- 4. Attention to words and groups of words in context whose value will be increased because of intensive work done with them in composition and grammar. This should involve the application of training and should illuminate the context.
- 5. Exercises in classification of words as to thought relationships. This work may include lists of synonyms and synonymous expressions, and of words with common roots, prefixes, and suffixes.
- 6. Testing of vocabulary growth by use of both informal and standard tests.

# II. Steps in Developing Accuracy in Word Recognition

- 1. Discovering remedial cases early and making specific diagnoses of their individual difficulties, followed by remedial treatment.
  - 2. Checking habits of attack upon new words to discover pupils

whose habits are faulty, followed by substituting more economical procedures.

3. Making certain that pupils learn common sight words, like when, because, among, preferably in groups of words.

## III. Suggestions for Training in the Independent Use of Habits of Recognition

- 1. Have pupils attack the context with a definite purpose in mind. This may suggest the meaning or pronunciation of many words. At times, the question may be asked: "What are some of the words we might expect to find in a story about Indians (or warships or harvesting)?"
- 2. Assign a unit short enough to suit the attention span of the reader.
- 3. Train pupils to be independent, yet to know quickly whether they need help with special words.
- 4. Keep a list of individual difficulties as a basis for remedial drills.
- 5. Check comprehension, giving special attention to idioms and constructions which may prove puzzling—negative expressions, like if, but meaning except, only.
- 6. Check comprehension, noting tendencies to overweight or underweight words.

## Junior and Senior High School

# I. Steps in Extending a Meaning Vocabulary

- 1. Rapid growth of vocabulary through actual experience and wide reading. Special attention to words and idioms significant in new subjects.
- 2. Attention to words and groups of words in context whose value will be increased because of intensive work done with them in composition, grammar, and foreign language study. This should be a carrying over of training and should illuminate the context.
- 3. Intensive study of carefully selected words to show wealth of English language and the values of words in expressing shades of meaning.
- 4. Training in making and interpreting definitions, usually depending upon synonyms and illustrative sentences.
- 5. Training in judging relative values of words in context, so that dictionaries and other helps may be sensibly used without over-emphasis on detail.
- 6. Exercises in classification of words as to thought; arranging word lists under appropriate headings; making lists of synonyms

and synonymous expressions, of antonyms, of words with common roots, prefixes, and suffixes.

- 7. Training in knowing and using all the resources of the dictionary.
- 8. Testing vocabulary growth by both informal and standard tests.

### II. Steps in Developing Accuracy in Word Recognition

- 1. Early discovery of remedial cases and specific diagnosis of their individual difficulties, followed by remedial treatment.
- 2. Checking habits of attack upon new words to discover pupils whose habits are faulty, followed by substituting more economical procedures.
  - 3. Exercises in word grouping for slow readers.

# III. Suggestions for Training in the Independent Use of Habits of Recognition

- 1. Have pupils attack the context with a definite purpose in mind. Train them to expect certain types of vocabulary in definite situations.
- 2. Train pupils when to ask for help, when to look for help in dictionaries, when to make note of words to look up later.
- 3. Train pupils to check comprehension by reference to the purposes in mind and to guard against giving words too much or too little weight.

#### CHAPTER V

# THE RELATION OF READING TO CONTENT SUBJECTS AND OTHER SCHOOL ACTIVITIES<sup>1</sup>

The importance of developing effective reading habits in content subjects. It is a strange though undoubted fact that pupils are often said to be "satisfactory" in reading who yet fail in certain informational subjects, such as geography and history. This condition was revealed in the study of school failures in the Cleveland Survey. The proportion of failures in reading generally is small as compared with those in other subjects. The reason is apparent. The reading done in the so-called "reading period" has been largely narrative. Yet studies have demonstrated that the pupil who reads narrative material quite well may read very poorly when the passages tell the conditions of an arithmetic problem or give directions to be followed in the study of grammar. Such situations indicate that there must be a broader conception of the variety of skills and habits to be developed before pupils can be said to read adequately.

Partial solution of the problem of training pupils to read effectively lies in the cultivation of appropriate reading habits in every school subject and activity. Just as spelling and language habits must be emphasized in every subject, so essential reading habits must be cultivated in the study of literature, arithmetic, history, geography, and other content subjects. Each subject, in addition to the general habits employed in reading, requires specific skills peculiar to its purposes and subject matter.

Purpose of this chapter. It is the purpose, therefore, of this chapter to show the relationship which exists between the objectives

¹ The following persons contributed suggestive materials for this chapter of the report: Bessie Goodykuntz, Alice Brennan, Minnie Kinker, Charmian Johnson, Alice Phelps, Irene Conway, Aileen Stowell, Elizabeth Whitcomb, Sue Snow, Florence Hawkins, Flora Nettleman, Betsy Jane Welling, Isabel Smith, Harriet Hinman, June Mapes, Rosemary Featherstone, Myrtle Best, Vilma Rottenstein, Ilo Hatfield, Morrison Van Cleave, Carl Cotter, John Dambach.

<sup>&</sup>lt;sup>2</sup> Charles H. Judd and Guy T. Buswell, Silent Reading: A Study of Various Types. Supplementary Educational Monographs, No. 23. Chicago: Department of Education, University of Chicago, 1922.

<sup>&</sup>lt;sup>8</sup> Estaline Wilson, "Specific teaching of silent reading." *Elementary School Journal*, 22 (1921), 140-146. Chicago: Department of Education, University of Chicago.

set forth in Chapter I and the various activities of the school that involve reading. This includes three steps:

- 1 Calling attention to the situations arising in the regular work of the school which give occasion for learning through reading. This is of particular importance in the primary grades, where reading is built largely upon the experiences of the pupils and upon meanings already established All grades, however, neglect to use many situations which afford good opportunity for reading. Pupils would learn to follow the printed directions in the texts if the teachers didn't read them first Pupils should learn to read recipes as well as to follow them. New games to be played, dresses to be cut out, radios to be built, all require reading. In these and similar situations reading should function in school as it does in life outside of school.
- 2. Showing how the reading which pupils do in the study of various school subjects contributes to the development of interests and abilities. The study of every subject requires the use not only of the essential reading habits but also of additional specific skills. These skills depend both upon the nature of the subject matter and upon the purposes for which it is read. For example, pupils comprehend geography problems and arithmetic problems by means of very different reading habits. Furthermore, geography material is read differently when one is vicariously enjoying life in the tropics than when getting ready for an examination.

Perhaps the most important of the purposes for which pupils read is that of extending experience in various fields of interest. The classroom can contribute to this purpose only as it stimulates pupils to read extensively and with enjoyment. Such reading has been designated in this report as "recreatory reading." It has as its immediate objectives vicarious experience, informational background, appreciation, enjoyment It has as its ultimate objectives the development of permanent interests and of habits of reading which will provide for the use of leisure time. This reading, while not requiring intensive work and reflection, should nevertheless be guided. Pupils should have the impetus which comes from an interesting purpose in reading. They need not be held accountable for all they read, but there should be some sort of check which is in line with the purpose of their reading. They may prepare a dramatiza-

tion of some episode, may read or tell to the class a distinctive bit of information. Some teachers may find it necessary to give "extra credit" for extensive reading in order to foster it. In all events, such reading should be judged not alone for quantity but also, and more especially, for worth-whileness and quality.

In addition to this extensive reading, every subject requires intensive reading. Provision must be made for the understanding of simple terms which have a technical use. Again, problems must be solved, and the solution may require a search for data involving the reading and re-reading of material in order to select main ideas. Material must be organized; it must be associated with experience, and definite steps taken to remember it. Such reading is referred to in this report as "work-type reading."

While work-type reading is usually the sort thought of as study. both types are used in the study of a subject, and no lesson or series of lessons is apt to use one exclusively. Whenever reading is not merely cursory, but is done for a conscious purpose it is study. The reason for thus labeling reading as "recreatory" or "work-type" reading is to call the attention of teachers to the place of each in the study of a subject. When teachers have failed to differentiate between materials appropriate for recreatory reading and for worktype reading, they have frequently used literary materials to give pupils training in skills necessary only to work-type material, such as finding answers to questions, selecting main points, outlining. The result is that, instead of finding enjoyment in reading, pupils dislike to read and will not engage in such activities independently In view of these facts, many recent reading books have furnished, in addition to literary material, information from various fields, encyclopedia references, and tests. The guidance given in the reading of these various types of subject matter is usually very suggestive as to methods of study. The difficulty is, however, that these methods are not applied by the pupils when the actual study of a subject is at hand. Consequently, the skills are never used habitually.

3. Suggesting by means of illustrative lessons how pupils may develop habits of work. Teachers should use these lessons merely as illustrations and in turn make their own daily assignments reading situations. The chief purpose of these lessons is to show the importance of assignments which require pupils to read actively and to

react in very positive ways. The conduct of the class conferences which follow, the way in which pupils attack the work, the distribution of time, the adaptation of work to individual abilities and other details of procedure are all important aspects to be considered by the teacher when she makes an assignment.

# A. READING IN THE INITIAL PERIOD

#### Grade I

The discussion in Chapter VI sets forth two ways in which reading relates quite definitely to the other activities of school life, namely: the use of experiences as a basis for reading lessons and the use of all opportunities to read which occur in numerous classroom activities.

In using pupils' experiences as a basis for reading material, the subject matter is organized by the pupils and teacher, written on the board, and perhaps later mimeographed. In using other situations which give occasion for reading, the teacher should make use of it in a natural way. It is possible to make many situations into reading lessons, but some are so artificial as to be grotesque—for example, writing "Good morning," "Please bring me your book," and similar expressions, when oral expression is the normal procedure.

The material which follows illustrates both relationships, namely: reading based on experience and reading motivated by needs.

## Nature Study

This material was developed with a superior group of pupils (I. Q. from 109-139). Modification would be necessary for slower groups.

The teacher made each of these lessons into lesson cards, which were reviewed from time to time during the year. Some of the lessons were made into individual books by the pupils, who pasted leaves or drew pictures to accompany the typewritten sentences given out by the teacher.

Leaves

This is an oak leaf.
This is a maple leaf.
This is an clm leaf.
This is a catalpa leaf.
The Caterpillar
The caterpillar eats leaves.
It cats and eats.
Then it spins a cocoon.

It sleeps all winter.

In the spring it comes out a beautiful butterfly.

The Stars

This is the Big Dipper (children illustrate).

It has seven stars.

Four stars are in the bowl.

Three stars are in the handle.

We call it the Big Bear, too.

Other topics for nature study lessons would include birds, pets, things in the country, flowers in our garden.

#### Community Experiences

1. "Safety First" signs. (These are made to serve a real purpose and are posted in conspicuous places.)

Stand on the curb.

Look both ways.

We take care of ourselves.

2. Health.

Pupils match sentences with pictures. Later, the sentences are given pupils to illustrate with crayola drawings. Sometimes the list is written on the board and one is acted by a pupil for the others to guess.

I brush my teeth.

I wash my hands.

I sleep long hours.

I open my windows.

I drink milk.

Sometimes the teacher writes the first part of the sentence on the board and pupils select the best endings.

To keep well I must:

drink milk

eat more candy

stay up late

go to bed early

This sort of lesson can be made into flash-card exercises where pupils answer "yes" or "no." Whenever the teacher uses the informational material valuable in itself in reading situations, she is accomplishing a double purpose.

Other community activities include banking, excursions, fire prevention, and community chest campaigns.

#### School News Bulletin

Such bulletins as these may be put upon the blackboard and used for a week or made upon charts, or, better still, on cards which can not only

be preserved and re-read frequently but also be moved about in order to shift the order, thus preventing memorization.

We are going to have a party. We will ask Miss Smith to come. Miss Brown will come. She will bring her children.

#### Social Activities

"Morning Newspaper," printed on the bulletin board

To-day is October 31.

This is Hallowe'en.

We have a surprise.

It is large and round and yellow.

It grew in the garden.

It grew on a vine.

What is it?

What shall we do with it?

The pupils gave the words pumpkin and Jack-o-lantern which the teacher wrote on the board. She then used various devices for attaching meanings to the new symbols. She wrote other words on the board: large, yellow, grew, round, garden, and said to the various pupils "Draw a line under grew, garden," etc., until all were underlined.

"Erase yellow, round," etc., until all were erased.

The teacher then held up a card that said.

Jack was in the ———.

Children finished the sentence.

He found a big, yellow —

Children finished the sentence. She then passed out papers on which were more sentences to be completed and on another sheet were the words needed. The pupils took the sentences and words to their seats for independent work.

#### School Parties

The school party affords reading experiences as well as language opportunities. First, the pupils selected the best invitation from the various ones suggested.

We want you to come to our party.

Our party is on Tuesday. Will you come?

We are going to have a party on Tuesday. We hope you will come.

### Responses:

We will be glad to come to your party on Hallowe'en.

Thank you. We will be glad to come to your party.

Then the preparation for the party necessitated the making of plans. The pupils asked, "What can we do?"

The suggestions were:

We shall have a Jack-o-lantern.

We must have some cakes.

We shall drink milk.

We can play games.

We shall give our play.

We shall sing our new song.

The next morning the bulletin board had the following announcements: 4

To-day we shall plan our party.

Jack, James, Henry and Ben may make one Jack-o-lantern.

Helen. Lucille and Mary may make a Jack-o-lantern.

Louise and Jane may choose a game.

Who can give our play?

Dick may choose a song.

Ernest and William may choose a game.

The day of the party the bulletin board announced these duties

We will have our party to-day.

Sterling will pass the napkins.

Laura will fill the cups.

Frances will pass the cups.

Rose will pass the cakes.

Other social activities include lunch time, birthday celebrations, games at recess.

# B. PERIOD OF RAPID GROWTH IN READING

#### Grades II and III

Many of the plans used by first-grade teachers to make of reading a thought-getting process continue to be valuable in these grades. Too much emphasis cannot be placed upon the importance of introducing more content material. Only as pupils have rich experiences, something to do, and something real to think and talk about, can vocabularies be enlarged. There is urgent need for more books of the non-literary type, which can be read by pupils of this period. There are at present a few books in which pupils can read about how to play games, nature-study, health, numbers—topics which formerly were merely talked about. Informational readers, language books, and geography textbooks in which the material is concrete,

<sup>4</sup> When directions such as these are written, it should be obvious to the pupils that it is a way of saving time. The directions should be written before the time arrives, and the fun of the party should not be discounted in advance by having to read what could easily be said.

interestingly told, and fundamentally good, are also available for use in these grades. They are valuable because they afford new types of reading experiences. The reading skills which must be begun are: finding answers to questions, following directions, selecting big points, remembering, and relating what is read by experience.

#### Health

The following lesson is copied from a second-grade reader. It illustrates not only the use of health lessons as reading material, but the beginning of a method of work in reading.

Reading to find out how to stop nosebleed.

#### How to stop nosebleed.

Have you had the nosebleed? How did you stop it?

If you will follow these rules, you can stop it quickly.

Loosen anything tight around your neck.

Wet your handkerchief or a piece of paper in cold water. Put it under your upper lip.

Do not blow your nose.

Sit down quietly with your head hanging backward. Your nose should stop bleeding soon.

#### How to remember

Close your eyes and try to tell in order all the things which will stop nosebleed. You could not remember them all, could you? This was because you had read the lesson only once. We do not remember things very well if we read them only once. We remember them somewhat better if we read them two or three times. If you will do the following six things, you will be able to remember what you have read:

- 1. Read it through carefully once.
- 2. Choose the main things which you want to remember.
- 3. Close your eyes and try to say these main things.
- 4. Look back to see if you missed any.
- 5. Try this until you can say them all.
- 6. Act out the main things which you have learned.

Use these six rules in studying the lesson about the nosebleed.

#### Activities

#### Making Gardens

The pupils who had made gardens brought a sample of something they raised in their gardens. Those who didn't have a garden brought something they would like to raise next year. The following sentences constituted the reading lesson. (The blank spaces were left in order to force

pupils to read and get the thought before supplying the missing word correctly. The only oral response required was the one word which made the sentence true. The fact that the children had the articles to produce as evidence acted as check on correctness. Such a scheme is contrasted with the practice of merely calling the words, which is no guarantee of thought-getting.)

brought lettuce.
brought onions.
brought radishes.
brought a tomato.
Who raised the carrot?
The came from John's garden.
The came from Mildred's garden.
Howard brought the
The came from the store.
Who wants to raise them next year?
Margaret brought the ———.
What can we do with it?

#### Caring for a Rabbit

A child brings his rabbit to school and tells how it should be cared for. The teacher writes the directions:

Feed the rabbit.

Give the rabbit fresh water.

Clean the rabbit's cage.

Let the rabbit out for play.

Children are anxious to do these things, and it is decided that the bulletin board will show each day who has been chosen:

John, feed the rabbit.

Ellen, give the rabbit fresh water.

May, clean the rabbit's cage.

George, let the rabbit out for play.

Questions arise as to which children have had turns, so records are kept:

John fed the rabbit.

Ellen gave the rabbit fresh water.

May cleaned the rabbit's cage.

George let the rabbit out to play.

Alice forgot to feed the rabbit.

The record could be supplemented with items of interest which might be put in book form.

The rabbit ran away.

He hid in the corner.

The second grade came to see our rabbit.

#### Nature Study

This lesson shows how riddles may be used with nature material in thoughtful silent reading exercises. Third-grade pupils can make riddles for second-grade pupils or for each other to answer, thus combining need for sentence making with need for sentence reading.

The pupils brought various kind of plants to school for identification.

I grew by the street.

I grow tall.

I have big green leaves.

You like to smell my leaves.

I have a big brown bush at my top.

Pupils have bird pictures with short descriptions on the back, such as these:

Everybody loves me.

My nest is not very tidy, but my eggs are a lovely blue.

In summer I live in the grassy meadows and fields.

I sing my own name.

The teacher writes questions on the board which the children answer by reading the various bird cards.

What bird is greedy?

What bird sings its own name?

Such work may be used as seat work by letting pupils exchange the cards. It may also be used by letting each pupil have one card which he reads in order to identify a particular bird.

#### Language

These "movies" were written by fourth-grade pupils for third-grade pupils to act. They were typed on cards which were passed around. Each child did as his card directed. The others guessed. The importance of terse, interesting sentences was apparent to the writers.

- Play you are mowing the lawn. Run around the outside of the lawn first. Mow in squares until finished. With scissors clip the grass at the edge of the walk. When you have finished pretend that you are fanning yourself.
- 2. Play you are a newsboy. Get some drawing paper for newspapers. Walk about the room calling, "Papers! Papers!" Ask two different people to buy. The first one does not buy. The second one gives you a dime. Give him his change.
- An auto ride. Get in on the left side. Take hold of the wheel. Get out on the right side. Crank it. Get in again on the right side.

#### School Excursions

After a trip to a lumber mill, where the children observed the process of making logs into lumber, the pupils talked about what they had seen on the trip. The following group composition was used as a reading lesson by foreign children, whose experiences could not be anticipated by the teacher. Using such a group, experience enabled her to utilize a vocabulary which she knew had a common background of experience and then associating these meanings with the printed word.

We took a walk to Chiloquin mill.

We saw many logs in the water.

Two men guided the logs out of the water.

They pushed them on to a moving stairway.

One man at the top caught them with a big iron hook.

Another man put them on the carriage.

Some of the logs were very large.

Other logs were small.

The head sawyer sits on one side of the carriage.

John's father is the head sawyer.

He tells the other men how to cut the logs.

The ratchet setter sits on the carriage.

Fenn's brother was the ratchet setter.

#### Arithmetic

This work is carried on by individual pupils at their seats. The child places yes and no at the top of his desk. As each problem is read, it is placed under the word that answers the question. A key card may be used for checking.

- Oranges are 50c. a dozen. Can Helen buy half a dozen with 2 dimes?
- 2. If there are 23 children in our room and 4 are absent, are 21 children at school?
- 3. If you can learn 3 spelling words in a day, can you learn 25 words in one school week?

#### Outside Reading

The pupils tell the teacher about the books they read. She writes down what they say and places the sheets on the reading table for all to read. Children are eager to read books in order to have their thought written down. They also show great interest in reading what others have said.

What Dick told me.

"'Little Dramas' has good stories to act. I wish we could act out the story about the timid hare and the lion. I should like to be the lion. It would be fun to roar."

What Ruth told me.

"I like 'Storyland in Play.' The story about the foolish turtle is interesting. The turtle was having a nice ride with the geese. He should not have talked."

# C. PERIOD OF ENRICHED EXPERIENCE Grades IV. V. and VI

Increasingly diversified reading habits. The habits and skills which were begun in the first, second, and third grades take on new significance as the curriculum broadens and pupils begin to read an increasingly large number of textbook assignments. In the preparation of such material the problem of teaching pupils to read is largely one of teaching them to study.

As was stated in the introduction to this chapter, the teacher must first of all take into account the purposes for which material is to be read and determine the kinds of reading habits which will be most important in the study of the assignment. The lessons suggested are not practice exercises. They can be of value only as they suggest how teachers in the regular work of the day may: (a) make assignments which will necessitate good reading habits and direct the pupils in utilizing those habits, (b) check in some way the results of the reading to determine to what extent appropriate habits are being developed, and (c) provide for gradual development of independent methods of work on the part of the pupil.

## Geography and Reading

Purposes of reading in geography. The study of geography involves both recreatory and work-type reading. No lesson or series of lessons should employ one to the absolute exclusion of the other. The teacher who fails to recognize that both have a distinct place does one of two things; she either emphasizes recreatory reading to such an extent that the geography becomes a haphazard subject from which the pupil gets neither accurate information nor good habits of work, or she confines the study of geography so exclusively to work-type reading that it becomes a routine recital of dry facts.

One reads geography to gain experience, to secure through reading what one would get directly were one to visit the section of the world described in a passage. There are tourists who miss the scenery because they are too busy reading the guide books. Geography may in the same way miss its main purpose if pupils get no experiences from its study but experiences in answering questions, selecting main points, outlining, and map study.

First of all, then, there must be provided a wealth of material which can be read for pleasure and for a background of information. Not only must all possible material which is simple be supplied, but material varying in difficulty to meet individual needs should be provided. In the use of such material pupils read extensively. Experience teaches that interpretation of such material is most effective when interest is keen because of some previous contact or when some other sort of stimulation is provided.

The work, or study, type of reading in the field of geography involves practically all the general reading skills and habits necessary to intensive reading. Pupils must analyze what they read to find answers to questions, to secure facts relating to larger problems, and to select the main points in a paragraph of actual material. Pupils must associate ideas in right relation and they must associate what is read with previous experience. They must be able to grasp the author's organization and be able to reorganize what they read. They must be able to form accurate judgments in the light of geographical principles and they must be able to retain what is read, both for immediate and for future use.

Whenever it becomes apparent to the teacher that the reading in geography is unsatisfactory because of the lack of such general abilities as those just mentioned, the teacher should utilize the reading period for drill in the use of these skills

In addition to those general abilities, the reading and study of geographical materials presents a number of reading situations involving special habits which do not occur in other subjects. These include reading of maps, charts, graphs, statistical tables; reading of pictures and slides; reading of railroad folders; understanding of the vocabulary peculiar to geography; relating facts to principles; remembering locations apart from logical associations. Drill in such habits and skills peculiar to geography should be emphasized in the geography classes.

There follow some illustrations of the guiding of reading in connection with work in geography.

Extensive Reading in Preparation for a "Round-Up"

The pupils in a fourth grade in the middle west were studying the western plains as a part of their regional study of the world. A boy in the class, who had recently moved into the city from a Montana ranch,

told stories of the life there, which stimulated great interest in cowboys and western ranches. The class decided to have a "geography round-up" in which various groups could report what they were able to find concerning special topics. The subjects suggested were: Early History of the Plains; Description of a Ranch; How a Cowboy Dresses; A Cowboy's Amusements; The Round-up; Cowboys in Other Lands; Theodore Roosevelt as a Cowboy; Chicago Stock Yards.

Each group selected a chairman and made a list of questions as a guide in reading. These questions were revised after some reading, especially when it was discovered that the books did not always agree with what the boy from Montana had told. This necessitated extensive reading, also comparison of dates of publication and the reliability of statements. The questions served as an outline from which the pupils made their reports.

An additional stimulus to careful reading and searching for pictures was occasioned by the appearance in the city of the motion picture entitled "The Covered Wagon."

The following books were used as references:

Wister, The Virginian
Hough, Story of the Couboy
Richards, A Tenderfoot Bride
Grinnell, Jack, the Young Ranchas a
Grinnell, Jack, the Young Coubog
Hagedorn, A Boy's Life of Roosevelt
Hooker, Story of an Indian Pony
Wheeler, Rolt, Boys' Book of Cowboys
Roosevelt, Ranch Life and Hanting Trail
Allan, Allan's Industrial Reader
Kellar, Commercial and Industrial Geography
Doubleday, Cattle Ranch to College
Roosevelt, Stories of the Great West
Sabin, Bur-B Boys
Carpenter, Carpenter's North America

The reading techniques involved were

- 1. Extensive reading in order to find answers to questions formulated in large measure by pupils themselves. (Pupils should learn to guide their own reading by formulating questions in advance and again to re-formulate questions after rather extensive reading.)
- 2. Intensive careful reading to settle questions where there was disagreement.
- 3. Oral reading as a means of contributing to class discussion or enjoyment.

Extensive Reading to Prepare Assembly Program on Mardi Gras Another illustration of extensive reading, very largely on the rec-

reatory level, is the reading done by a fifth-grade class which became especially interested in New Orleans. This interest grew out of the fact that a member of the class was going there to attend the Mardi Gras.

After a cursory reading of everything they could find, the class decided that the material was interesting enough to warrant their giving an assembly program on the subject. Using material for such purposes necessitates, first of all, the organization of what is to be presented.

Organization of ideas as guide to further reading. The method of organization used was for the class to suggest all the questions relative to the subject which might prove of interest to the pupils who would constitute the assembly audience. Examples follow.

- 1. Why did the people begin the Mardi Gras celebration?
- 2. What else is of interest in New Orleans?
- 3. What do the people do at the Mardi Gras?
- 4. What is the country like around New Orleans?
- 5. What do the people do?
- 6. How does cotton grow?
- 7. What is life on a plantation like?
- 8. What kind of clothes will Margaret need to wear in New Orleans at this season?

After the list was completed, the teacher called attention to the fact that many questions could be combined and that there should be some attention to sequence in order to make an interesting set of talks. The pupils then reorganized the list and arranged the following list of topics:

- 1. Getting to New Orleans from Detroit.
- 2. Historic New Orleans
- 3. Places of Interest in Modern New Orleans.
- 4. Industries of New Orleans.
- 5. Plantation Life.
  - . The Mardi Gras.

The pupils worked in groups and competed in making each topic as interesting as possible. Before they set to work, the teacher raised this question: "How are you going about the preparation of these reports?"

The pupils suggested the following procedure, which is typical of the sort of report based upon extensive cursory reading.

- 1. Use the indexes of the books to find references.
- Read the references and choose the part of the material which relates to the topic.
- Select key words or phrases which will suggest the most interesting things upon which to report. For example, in reading about plantations, the notes might be "one-horse plantation," "negro quarters," "picking cotton," etc.

4. Look over the notes and arrange them in the best possible order. If there are several pupils, the responsibility for reporting should be carefully divided so that there will be no tiresome repetition.

With these directions in mind, the pupils set to work. When the assembly program was presented, there were pictures secured from the Chamber of Commerce, anecdotes from history, negro dances, and melodies sung to banjo accompaniment by pupils in costume. The reading had functioned.

The list of readings included:

Bright m and McFarland, Essentials of Geography
J. Russell Smith, Human Geography
McMurry and Parkins, Elementary Geography
Carpenter, North America
Gordy, Studies of Later American History
Brooks, True Life of Abraham Lincoln
Lamprey, Days of Commanders
Markham, Real America in Romance
Burton, A Story of United States

#### Reference books:

World Book Various encyclopedias— Book of Knowledge

Southworth and Kramer, Great Cities of the United States

Intensive Reading to Explain Certain Industrial Conditions
One of the outcomes of extensive reading in a subject such as
geography should be the discovery of problems for additional intensive reading and study. If such problems do not suggest themselves to the pupil, the teacher may propose them as a challenge
to more intensive reading and reflection.

Following the study of New Orleans just reported, the teacher raised the problem which is given in the lesson that follows. The study as suggested is typical of most problem-solving lessons. It required the use of all fundamental objectives—location of data, selection, comprehension, evaluation of data, organization of material necessary for retention. The assignment illustrates one way of attacking a large problem by resolving it into its important factors. This involves leading the pupils to realize that the larger problem is dependent upon several smaller problems and having the pupils help in the determination of the lesser problems. A thorough discussion of the assignment should precede the study, so that

pupils may realize what their study job is. Gradually, as a technique of independent study, pupils must learn to break big problems up into smaller ones for themselves.

Teacher: "You have been interested in the raising of cotton in the southern states. However, New England, which raises no cotton at all, ranks first in the manufacture of cotton cloth. Why is this?"

"What are the questions which you would need to answer before you could really account for this fact?" Discussions of the factors which enter into the situation led to four questions. The teacher wrote the major problem on the board, together with the minor problems.

Problems: How can the New England States, though they raise no cotton, rank first in the manufacture of cotton?

- 1. Where does New England get its raw cotton?
- 2. What advantages for manufacturing does New England have?
- 3. How did cotton manufacture start in this country? What effect did this have on New England?
- 4. What places lead in cotton manufacture? From a study of the map try to discover why.

She then proposed that the pupils work out the first question together, in order that each might learn how accurately he was able to study such an assignment.

Teacher: "How will you know where to begin to read?"

Pupils: "Find New England-manufacturing; find cotton-raw."

Teacher: "Find either topic. As soon as you have a statement which you think answers Question 1, you may stand."

Time was given for all pupils to find the answer. Meanwhile, the teacher discovered the pupils who were slow in the use of an index and gave assistance. She also found pupils who could not determine the relevance of statements.

Teacher: "In the same way you are to find the answers to the remaining questions. Work as fast as you can.<sup>5</sup> When you have finished, look at each question and think how you are going to answer it when we have a class conference. Re-read if necessary."

Such fore-exercises precede the study of an assignment and pupils are made conscious of certain factors in study. It is often worth while in such exercises to set pupils at work on a problem and at the end of two minutes to ask them to write down the questions to which they are trying to find answers. Pupils should learn the im-

<sup>&</sup>lt;sup>5</sup> While no time limit should be set which would lead to careless reading, all pupils should learn to work at maximal speed. If some sort of an informal test—true-false, completion or one-word test—is substituted for oral discussion, the pupils become n.ore accurate in this sort of intensive reading.

portance of keeping the problem in the foreground of attention when reading intensively.

## Intensive Reading with Responsibility for Remembering

In connection with the intensive sort of reading just suggested, pupils should learn to be critical of their successes and failures and to remember a reasonable amount of material read. The teacher may use some such plan as follows to reveal to pupils their present accomplishment. The aggressive attitude which results from finding oneself unable to average up to a task stimulates better reading of subsequent assignments.

To the pupil: Keller and Bishop, Industrial and Commercial Geography, page 81. From a single reading of this paragraph about the making of ready-made clothing by the sweating system, you should be able to tell why ready-made clothing is usually manufactured in large cities, what the bad effects of the sweating system are, and why the immigrants will accept low wages. Keep in mind every point which bears on any one of these questions. Study questions carefully before the reading begins. As soon as you have finished reading, close your book and fill out this outline.

- 1. Why is ready-made clothing usually manufactured in large cities?
  - (a) (b)
- 2. What are the bad effects of the sweating system?
  - (a)
  - (b)
  - (c)
- 3. Why will immigrants accept low wages?
  - (a)
  - (b)
  - (c)

# Arithmetic and Reading

Skills involved in reading arithmetic. As in the case of geography, arithmetic makes use of the general reading skills previously listed. Pupils must select main points, get the conditions of a problem clearly in mind, relate facts to principles. The techniques involved, however, in getting the conditions of an arithmetic problem in mind differ decidedly from those which enable the pupil to comprehend a geography problem. The failure of pupils to read their problems carefully has long been proclaimed by teachers as an outstanding

cause of failure to solve them correctly. On the other hand, pupils who have been trained in the specific reading skills involved in reading problems have shown increased ability in problem solving.

What are the reading skills necessary to the effective understanding of a problem? School practice usually required pupils to "read the problem" perfunctorily. This reading takes place after the problem has been solved, preliminary to the "explanation of the problem." No wonder that the routine sort of oral reading which thus takes place has small relation to real comprehension. The crucial reading is the silent reading which precedes the solving. If this reading is well done, the problem situation should be remembered, just as important facts in any other material are remembered, long enough to enable pupils to explain the conditions of the problem intelligently without the customary oral reading. Again, the practice of having pupils state "what the problem tells and what the problem asks" results in a mechanical fitting of words into a formula which seldom gives pupils much sense of the real situation.

It is obvious from the character of the subject that the reading done in arithmetic is for the most part on the work level and of two general types:

- 1. The careful reading of informational material which is similar to the kind of reading done in civics. This type is most important in Grades VII and VIII, where the business applications of arithmetic begin, e. g., banking, insurance, taxes, budget making. Such topics involve more reading than problem solving.
- 2. The intelligent understanding of the conditions of a problem. If the pupils are to comprehend problems, such specific skills as the following are necessary:
  - (a) The vocabulary peculiar to arithmetic must be understood: such terms as average, total, at the rate of, etc.
  - (b) The problem situation must be comprehended. The problem must tell a story, just ah history tells a story, so that the

<sup>6</sup> Remedial Work in Arithmetic. Ohio Research Bulletin, p. 347.
Columbus, Ohio: Ohio State University, December, 1923.
Worth J. Osborne, Corrective Arithmetic. Pp. 56, 97, 148. Houghton Mifflin Co., 1924.

<sup>7</sup> Walter S. Monroe, Measuring the Results of Teaching. Pp. 163-164. Houghton Mifflin Co., 1918.

way in which numbers and their relationship are to be used becomes vivid.

- (c) Main ideas must be selected, regardless of quantitative elements.
- (d) Judgments must be formed both as to correctness of processes used and validity of answers.

The lessons which follow may be used as drill exercises to increase ability in these specific skills. These exercises may form a part of the work during the regular reading period. As in the case of other subjects, when the teacher finds certain reading skills to be inadequate, she may spend the reading period to aid in their development. Such exercises may also occupy a part of the arithmetic period, especially when similar exercises are made using the material of the lesson at hand.

All of the exercises which follow may be used somewhat similarly. The first step is the selection of the pupils who need the special reading drills. Such a grouping should probably be determined by the use of some standardized problem test. Teachers usually know the pupils who do abstract work satisfactorily but who are unable to solve problems.

Having determined the group who need drill, the others should be allowed to attack problems independently. It frequently happens that a few weeks' attention to reading on the part of the whole class will reduce the drill group to a small number. For these pupils there should be mimeographed sheets prepared similar to these exercises or the tests may be written on the board. Responses should be written, so that each member of the group can be rigorously tested as to his ability to interpret each problem.

Keeping records of scores made from time to time increases interest, just as in abstract drill exercises.

# Expressing Ideas in Different Ways to Show That Certain Technical Phrases are Understood

To the pupil: Rewrite each of the following sentences. Do not use the words underlined, but use some other words that will show that you know what the underlined words mean.

For example, the sentence, "An eight-cent bag of marbles contained 128," might be rewritten this way: "There were 128 marbles in a bag

of marbles that cost 8 cents"; or "A bag of marbles that cost 8 cents had in it 128 marbles."

- 1. I can buy pencils at the rate of 2 for 5 cents.
- 2. How much remains?
- 3. After buying a house, a man had to spend \$300 for repairs.
- 4. George walks at the rate of 3 miles per hour.
- 5. Two boys agreed to cut a lawn.
- 6. Henry buys oranges at 4 cents apiece.

Providing for Comprehension of the Situation in a Problem

To the pupil: The following problems tell the story of a family who took an automobile trip. You are to read the problems and to answer the questions printed below, but you are not to work any of the problems. You may read them as often as is necessary to answer the questions. Work as rapidly as you can. Number your answers just as the questions are numbered.

- 1. The Brown family took a two-weeks' trip in their automobile. They went 975.6 miles in all. They did not ride on Sundays. How far did they go per day on the days that they did ride?
- 2. It cost \$21.32 for gasoline, \$2.80 for oil, and \$4.75 for repairs. Mr. Brown estimates the wear and tear on automobile and tires at 8% cents per mile. Using this estimate, what was the total cost of running the car for the trip?
- 3. They spent twelve nights and had twelve breakfasts at farm houses or small hotels. Twice they paid \$1.75 for lodging and breakfast for the family. Five times they paid \$2.00. Four times they paid \$2.50. Once they paid \$3.50. What was the total cost of lodging and breakfast?
  - 4. How many days did they need to buy food?
- 5. Why could you not find what the cost was for each member of the Brown family?

Reading to get main ideas in a problem. The eye-movements of adult readers show that in reading problems the effective reader is one who reads first for the situation, then goes back for the quantitative elements.<sup>8</sup> Pupils should be able to read and remember the story part of the problem and certainly pupils who explain a problem worked on the blackboard should be able to state the conditions of the problem clearly without reference to the text. They should also learn to think of the process apart from the figures involved.

<sup>&</sup>lt;sup>8</sup> P. W. Terry, *How Numerals Are Read.* Supplementary Educational Monograph, No. 18, Pp. 3-11. Chicago: Department of Education, University of Chicago, June, 1922.

- (a) To the pupil: Read the problems in your arithmetic and then, without referring to your text, be ready to tell the situation in the problem. thus:
- 1. In 1908-09 the total amount of cane sugar produced by the world was 7,324,853 T.; of this the United States produced 1,045,000 T. What percentage did the United States produce?

Tell in this way:

In a certain year all the cane sugar produced in the world was so many tons. Of this whole amount the United States produced so many tons. We are to find what percentage was produced by the United States.

2. In a recent year the output from the coal mines of Illinois was 41,490,104 tons. How many carloads would this make, allowing 40,000

pounds to the load?

In a recent year we are told that the Illinois coal mines produced a certain number of tons of coal. How many carloads would this be if we allow so many pounds to the load?

- (b) To the pupil: In a simple statement tell how you would solve if you were told the figures:
- 1. If you know how much money you have in your pocket and how much you spent while down town, how can you find how much you had when you left home?

I would add what I had in my pocket to the amount I spent down town. 2. If you know how many desks were bought for your room and how much each desk cost, how can you find out how much all the desks cost?

3. A boy had a certain number of golf balls. He sold them at so much apiece and spent the money for marble shooters. How can you find the number of shooters he could buy?

4. If you know the distance a train has gone and the number of hours it took to go that distance, how do you find its average speed?

- (c) To the pupil: Can you understand your arithmetic problems when you read them? If so, you can do these exercises correctly. After each problem is a list of things which might be done. You are to show that you understand by filling in the blanks correctly, then drawing a line under the word or words which tell the right thing to do.
- 1. A man picked 28 quarts of cherries. He used some of them for canning and sold the rest at 15 cents a quart. If he received \$1.50 for what he sold, how many quarts were canned?

The manager of a service station has a tank containing 500 gallons of gasoline. If he sells to 55 customers an average of 6 gallons each, how much will he have left at the end of the day? Multiply

Multiply	Бу	_	
Divide	by		
Then Add	Subtract	_ Multiply	Divide

# Reading in Order to Judge Whether or Not an Answer Is Absurd: Estimating Amounts

To the pupil: In the following list of problems and answers some of the answers given are reasonable, others are unreasonable. Write "yes" after the answers which you think are just about correct and "no" after those which are very incorrect.

- Twenty-three children to our class, but only 19 are present.
   How many children are absent?
   Ans. 42 children.
- James has 28 marbles. He gives half of them to Charles. How many has he left?
   Ans. 56 marbles.
- We learn 2 words a day in our class. How many do we learn in 8 days?
   Ans. 16 words.
- If you can get 3 gingerbread dogs for 5 cents, how many can you get for 10 cents?
   Ans. 18 gingerbread dogs.
- 5. A boy owned 3 kites, each of them having 150 feet of string. How many feet of string had he? Ans. 450 feet.

# Industrial Arts and Reading

Workers in industrial fields who want to be intelligent about their occupations read widely. Electrical workers have their magazines; all trades have their journals; motion picture magazines have news which is of specialized nature. While it is not the function of the elementary school to provide for special vocations or vocational reading, it is important to give pupils reading experience in situations which are similar to the situations in life which will require reading.

An important purpose for which one reads in this field is the following of directions. Many situations in which pupils should be learning "to read and do" are inadvisably used by teachers as "telling" situations. To follow directions given orally and to follow printed directions are different matters. It should be noted by teachers that textbooks are constantly giving directions which pupils are to follow in the preparation of their work. The reading of directions carefully and accurately is a reading skill very frequently de-

manded in life. Teachers, in their anxiety to have the directions followed correctly, usually read and explain them to the pupils. Pupils should learn to read directions independently. This part of the study is as important as doing what the directions say.

These lessons illustrate the use that may be made of directions in this field. These paragraphs were given to the pupils of a fourth-grade class who were interested in reading them chiefly because they knew they were to try the same thing.

## Reading in Order to Do What Other Pupils Have Done

To the pupils: The children of another school who have done this piece of work have written this explanation for you. You can read their report, find out how, and make butter too.

"We took a big bowl. We put sour cream in it. Cream is the top of milk. Milk grows sour when it is no longer fresh. We took an eggbeater. We beat the sour cream with an egg-beater. Soon it looked like whipped cream. Then we saw little lumps of yellow fat on the edges. More lumps appeared. There were many, many lumps. We had made butter. We washed it in clean water. We added salt. We gave a party to Grade 2. We ate the butter on pieces of bread."

To the pupils: The children of another sixth grade have worded this paragraph to tell you how they made clay plates. Read carefully and when you can fill out the blanks in the test below showing you understand what you read, you may make some clay plates.

"We looked at a plate. We saw that it was flat and shiny. We found out from the encyclopedia that dishes are made of clay. We took some wet gray clay. We made it smooth. We picked out all the small stones and sticks. We made a clay ball. We rolled the ball flat on the table with a bottle. It looked like a pie crust. We put sand on the table to keep it from sticking to the table. We lifted the clay crust. We put it on a plate. We patted it flat and cut off the edges of the clay. We put it on a shelf to dry. The next day we found a dry clay plate. We put lines and shapes on it with "underglaze" paint. This paint looked like water-color paint but we found that it could resist heat. We put the plate in a very hot oven called a kiln. It stayed there twelve hours. When it came out, it was pale orange color, and would not break so easily. We next put 'glaze' on the plate. Glaze is a thin coat of glass. It looked like colored cream. We put the plate back in the kiln. When it came out, it was shiny like our dinner plates. Glaze protects the plates and makes them easy to wash. We each made a plate. Some of them were broken by the heat in the kiln. The others we use for our class parties. One day we went to the museum and saw many plates made long ago. We drew pictures of some of the plates that we liked best."

The recording of experiences by one class so that another class may try the same experiment makes this both an English composition situation and a reading situation.

#### Fold here

To make r	lates we took some	. We	made a	which
we f	lat with a	. We molded the	wet clay on a	<del></del> ,
Next day w	e had a dry clay	plate. We put	lines and shapes	on it
with	We put the pla	te in a ——	-, called a	It
stayed there-	It came or	ut colo	r. We next put -	
on the plate.	Then we put it -		When i	t came
out it was -	like our din	ner plates.		

### Reading and Physical Education

Reading in order to find out how to do something in which one is really interested constitutes a large field of careful study. Pupils are stimulated to careful reading when a new game or new rules of a favorite game are at stake.

Reading to learn a new game. The following material was mimeographed and sent to the boys with the instruction that they were to study the game and be ready to play without further instruction when the physical director came to the school.

The surprise came when, upon arrival, the director gave a quick true-false test covering points of the game and chose the first team according to the scores made thereon.

#### Field Ball

#### Equipment

1. Soccer or basketball.

2. Field same as a soccer or football field. At each end there is a striking circle, a semi-circle with a radius of 15 yards called "scoring circle." *Teams* are of eleven players arranged in the same formation as in soccer or hockey, viz., 5 forwards (1 center R and L inside and R and L wing), 3 half-backs (L and R and Center), 2 full-backs (L and R) and a goal keeper.

#### The Game

Starts with a "free throw" at center of field with the team of the thrower lined up behind him. It starts the same way after a goal is made, after a resting period, and after a foul, except in that case at the spot where the foul was made. A player having a free throw may go back and take a running start. When the attackers send the ball over the end line, the goal keeper is given a free throw or kick.

A ball thrown through the goal from a position outside the scoring circle counts two points; when thrown from a point within the circle, it counts one point. A ball so thrown that it passes over the cross bar

scores one point for the defending side.

When the defenders send the ball over the end line, the attacking side

has a free throw from the nearest corner of the field, the defenders being lined up outside the end line of the field.

Field ball is played in ten-minute quarters, with five-minute rest

periods.

#### Rules

Player may advance with the ball with one dribble; guarding can be done only in the scoring circle (the game is one of interception), and then in a plane at right angles to the ground. Outside the circle, the guards must stay 15 feet away.

The ball must be thrown 15 feet or over when thrown forward; it

may be passed backward any distance.

#### Hints to Coaches

1. Get men to play their positions and not rush the ball.

Have forwards cross and be fed by their half-backs.

Teach center to pass out to inside forwards and insides to pass out to the wings. The ball zigzagging forward but men running in a straight line.

Teach half-backs to intercept ball by guarding their opponents.

5. Rough playing is impossible if the rules are enforced.

After you have studied the above, test yourselves with these questions. Unless you can answer all correctly you are not ready to play the game.

How many men make up the team? 1.

How should the ball progress down the field? What are the rules for handling the ball?

What counts a score?

What happens when a foul is called? In what way is this game like soccer? 5.

What happens if the defender sends the ball over the end line?

The foregoing is an illustration of attaching a strong motive to testing oneself to ascertain the extent of comprehension. Pupils should come to realize that testing one's comprehension similarly in regular subjects has a value in the same way when the retention of material is important.

## D. PERIOD OF INDEPENDENT APPLICATION OF READING ABILITY Grades VII. VIII, and IX

Reading as a study medium. The study-reading habits of these grades are distinguished from those of earlier grades by the extent to which pupils are able not only to attack more difficult materials and assignments extending over a longer period of time, but also to choose appropriate methods of attack, to outline consciously what their plan of work will be, and to become aware of the values of the various reading techniques which previously have been directed by the teacher. When this stage is reached, reading has become independent study.

While reading is not the only method by which pupils study, it is the predominant one and is prerequisite to most other types. The problem of study is one of impelling assignments on the part of the teacher and the application of right reading habits on the part of the pupils. In no other way may pupils attain the emotional attitude which makes of reading a personal and stimulating experience and thereby an abiding and permanent interest.

## Reading and History

Purposes of reading in history. Effective reading habits enable children who study history to live vicariously the lives of historic characters. They may come to know not only the motives and achievements of those who have made history, but also the environment in which each in his own time has lived and labored. The experience of children is enriched not only by their coming to know "who's who" of each generation, but also by appropriating to themselves the historic setting of each character in his own age. Thus may be acquired the necessary perspective with which to view intelligently present-day life, whence it came, and whither it is tending.

This committee has attempted to make emphatic the necessity of providing pupils opportunity to read extensively. History assignments may be effectively adapted to realize this objective. History teachers should ever keep in the foreground that their business is to lead children to understand their heritage in order that they may as adults safeguard it and improve it for future generations. To make future democracy safe for the world children now in school must live the life of the human race through the ages, confront its difficulties, and overcome its obstacles. They may never be equipped to discharge the obligation of citizenship if history in school means for them merely the routine reading and reciting from a single textbook.

# Broad Reading for Enriched Experience

The assignment described below was made to an eighth-grade class as part of a review of the history of the United States. The history had been studied according to traditional textbook methods. The review introduced a study of the United States and its history from the point of view of the states. The assignment might be

divided among various groups of pupils, who would spend in preparation, not only their history study period, but their literature time as well, and in addition read at home. It is typical of the sort of assignment which might stimulate pupils to read extensively for a period of several days, searching libraries for material, eagerly alert to bring to the class conference a real contribution in the way of new and interesting facts and stories not discovered by other readers. Such purposeful reading is more of the recreatory than of the work type.

Before the pupils set to work on such an assignment it is well for the teacher to have them suggest the method of work best suited to the making of interesting reports; also, the sources from which to get information about best books to read—books in room library, bibliographies of collateral reading in textbooks and course of study, classified book lists such as appear in various books, and librarians in school and city libraries. (See pp. 110-112 for an illustration.)

To the pupils: Perhaps if we all knew more about the states which are not our own, there would be less of the boasting which many people are inclined to do about the state in which they live. This assignment tells you in advance some of the "high spots" in the history of certain of the western states. In reading, try to find out the significance of these items. In reading look for two things: (a) striking historical events, (b) famous sons of which the state is proud. (The group having the least reading might report first so that groups with states having more material available could be reading a week or more on their topics. The reports of states should not only interest the others in the state for the time being but should also incite them to read the books.)

California: Gold Rush; "forty-niners," "vigilantes," "pony express,"
The "General Sherman."

Colorado: Centennial States; Pike's Peak Country; Pueblos; "ghost towns."

Kansas: Bleeding Kansas: John Brown; "Immigration, a political rather than a personal matter."

Oklahoma: "Boomers;" L and Rush; "No Man's Land;" the mistletoe; the "Grandfather Clause."

Oregon: Sacajawea's "Bird Woman;" Astoria. Great Immigration (1843); "Fifty-four Forty or Fight;" the "web-footed state."

Texas: The "Lone Star State." Remember the "Alamo." In what connection did the people of the United States say that "Texas was but a misspelling of 'taxes?' ""Jefferson;" last fight in the War of Secession, May 13, 1865.

Utah: The Mormons: Alley of Death. Some outside readings in connection with a study of the states. Otis, Martha of California McNeil, Boys' Forty-Niners Fox, Carlota (California Before the Conquest) Hough, The Covered Wagon Hart, The Luck of Roaring Camp Otis, Seth of Colorado Shinn, Story of the Mine Brooks, Boy Emigrants Brooks, Boy Settlers Chamberlain, John Brown
Catherwood, Heroes of the Middle West
Irving, Capt. Bonneville Parkman, The Oregon Trail Hough, Fifty-four Forty or Fight Otis, Antonie of Oregon Otis, Philip of Texas Abbott, David Crockett and Early Texan History Abbott, Kit Carson, the Pioneer of the Far West Elliott, Sam Houston Munroe, With Crockett and Bowie Davis, Under Six Flags Whittier, Angels of Buena Vista Lowell, Biglow Papers Tourgee, Button's Inn Altsheler, Herald of the West Adams, Log of a Cowboy Wister, The Virginian Eggleston, The Circuit Rider Hough, North of '36 Dickens, Martin Chuzzlewit (?) Dana, Two Years Before the Mast

# Intensive Reading Relative to a Large Problem

Laut, Story of the Trapper

White, Gold

Thwaites, Rocky Mountain Explorations

If pupils in earlier grades have learned to read carefully when the problem is one of finding answers to questions in paragraphs and to larger questions involving the use of various reference books, they are now ready to attack a problem requiring interest and attention sustained over a fairly long period of time.

The following lesson illustrates the assignment for an eighth-or ninth-grade class which will stimulate pupils to study for several days on one problem. Following a week's reading, a class period of discussion will give opportunity for pupils to exchange ideas and for the teacher to clarify their ideas.

Teacher: "President Harding, in an address made at Vancouver, July, 1923, pointed to the century-old friendship between Great Britain

and the United States as proof that public will, rather than public force, is the key to international peace. When the time for discussion arrives, be ready to tell how each of the instances here listed is an illustration of what President Harding said."

- Rush-Bagot Agreement (1817) "Our protection is our fraternity, our armor is our faith."
- 2. The Caroline Affair (1837).
- 3. "The Aroostook War" (1883).
- 4. Webster-Ashburton Treaty (1842).
- 5. "Fifty-four Forty or Fight (1844).
- 6. Clayton-Bulwer Treaty (1850).
- 7. The Alabama Claims. ("This was the most important case that had ever been submitted to arbitration and its successful adjustment encouraged the hope that the two great branches of the English-speaking peoples would never again have to resort to war.")
- 8. The Behring Sea Controversy (1893).
- 9. The Venezuela Affair (1895).
- Attitude of British Government durin gthe Spanish-American War (1898).
- 11. Hay-Pauncefote Treaty.
- 12. Lord Alverstone and the Alaskan Boundary Dispute. ("It was the good fortune of the two countries that if at any moment rashness or vehemence was found on one side, it never happened to be met by the like quality on the other.")

"The moral of the story of Anglo-American relations," Lord Bryce says, "is that peace can always be kept, whatever be the grounds of controversy, between peoples that wish to keep it."

The teacher asked: "In preparing this assignment, what are you going to do?" The pupils suggested these steps.

- 1. Be sure we understand what the assignment means. (This necessitates some explanations of "public will" and "public force," and the use of the word "key" in this connection.)
- 2. Use index to find the references in our own text and several others. (Note: If pupils are inexperienced in use of index, one study period might well be spent in letting groups of pupils merely locate the page reference under each topic, preparatory to the study.)

3. Read what is told of each topic and then think how it is an illustration of President Harding's statement. Look for any exceptions.

4. Take such notes and page references as will enable us to recall the episode if necessary. Look over the assignment and think to ourselves how we will discuss each at the time of a class conference.

## Reading to Determine Cause and Effect

An important skill in reading is evaluating the material read and and forming judgments about it—in other words, reacting actively,

not merely remembering. In order that pupils may participate to the fullest extent, it is often valuable to substitute for oral discussion such a test as the following, or to give such a test as the assignment. Only where pupils have responsibility for all answers do they have full opportunity to develop careful reading and independence in study. Answers, therefore, should be written. Responses must, of course, be discussed later, so that the pupils may check their comprehension. The teacher may prepare a key for the checking. Discussion in such tests as this has, however, the social advantage of interchange of ideas. Repetition of the same test from time to time provides opportunity to measure the extent to which discussion has cleared up difficulties, gives the teacher an opportunity to give the pupils who need it special attention, and shows the pupils themselves how well they are remembering what is discussed.

Pupils soon come to realize the value of such a procedure and ask the teacher to give them an opportunity to try the test again, or better still, test themselves during their independent study period. One class has its slogan: "Test yourself before you are tested." This emphasizes the importance of attitude in work-type reading. "How to study" is of small value unless it is coupled with "want to study."

To the pupil: In the blank lines below write a short sentence which will tell the best reason you know why each of the statements is true:

will tell the best reason you know why each of the statements is true:
<ol> <li>In America the Industrial Revolution did not work any great hardship on the handworker.</li> </ol>
Statement
2. Free public education is an American ideal.
Statement
<ol><li>Slavery prevented the South from becoming commercially prosperous.</li></ol>
Statement
<ol> <li>The factory system developed a laboring class as distinct from a class of employers.</li> </ol>
Statement
5. "The reaper is to the North what slavery is to the South."
Statement
6. "No state can lawfully get out of the Union."—Lincoln.
Statement
<ol><li>The people can be trusted to defend a government of which they form a part.</li></ol>
G4 . 4 4

## Reading and Remembering

Such a test as the following may advantageously follow the reading of various biographies or may be used as an assignment to be studied with books open. Pupils can make these tests. Eagerness to test some classmate is always a motive for careful reading. "Teachers" always study harder than "students." A first-grade teacher who permits the pupils to ask her the questions on the lesson encourages very careful reading. Eighth-grade history teachers might have the same success.

To the pupils: This is a selection paper. In the spaces in front of the numbers in Column I place the letters of the phrases in Column II which best explain them. Write the letters clearly in the spaces.

1.	Jefferson
2.	Clay
3.	Garrison
4.	Jackson
5.	Marshall
6.	Calhoun
7.	Webster
	Lincoln
	Davis
10.	Douglas
	2. 3. 4. 5. 6. 7. 8. 9.

Column I

#### Column II

- A. Proposed the Kansas-Nebraska Bill
- B. President of the Confederate States
- C. Declared our Government was made for the people, by the people and is answerable to the people
- D. Declared this government cannot exist half slave and half free
- E. Acted as mediator between the South and the North for a period of thirty years
- F. Purchased Louisiana
- G. Published the Liberator
- H. Established the Spoils System
- I. A very prominent chief justice of the Supreme Court

# Mathematics and Reading

Informational reading in mathematics. The importance of reading as it relates to the reading of problems and the specific skills involved were discussed under the work suggested for intermediate grades. The arithmetic of Grades VII, VIII, and IX, the applications of percentage, etc., includes much that is more civics than mathematics. This social background material is informational, requires careful reading and a rigorous checking of comprehension. This is a strictly work-type reading. The lessons which follow illustrate the peculiar importance of reading when such a topic as bank-

ing is to be studied. Similar lessons would be valuable in study of insurance, taxation, and budget-making.

Attention is called to the fact that pupils are reading various texts as well as other material. Single copies of different textbooks should be provided so that pupils may have an opportunity to read the explanations and information as presented by different authors. The different sets of problems also afford the teacher a means of adapting the class procedure to individual abilities.

Reading extensively for information regarding savings. The subject under discussion was "the best way to invest money after it has been saved." The close contacts of banks and schools make the question of savings pertinent in all schools. Various suggestions were made, but the best one was: "Get advice from some trustworthy banker or the Better Business Commission." While the discussion might well have ended with this advice, the pupils proposed that, the next time a representative from the Banker's Institute came to the school to talk, they quiz him as to the various proposals that had been made relative to investing money. In order that they might be able to ask intelligent questions, the class decided to do some reading relative to investments. These references were read:

#### Commercial Accounts:

Wentworth-Smith, pp. 149-158, 160-62.

Chadsey-Smith, pp. 199-203.

Lennes, Jenkins, pp. 122-123.

Hunt, p. 218.

Hoyt and Peet, pp. 80-83.

Anderson, pp. 166-169.

Smith, pp. 25-26.

Talks on Banking, issued by Committee on Public Education, American Bankers' Association, 110 E. 42nd Street, New York, Talks Nos. 2 and 6.

Similar references were provided for savings accounts, stocks, bonds, and other investments.

Reading of a more technical nature was done by all members of class when the teacher brought to class a real stock certificate and again when each row chose some stock as a pretended \$1,000 investment and read the daily stock quotation page of the local newspaper.

The test of the comprehension of this reading came when the pupils prepared the questions which they asked the banker. The questions were of the following type:

Why do banks pay such a small rate of interest on savings accounts when it costs so much to borrow money?

What causes the variations in the price of Liberty Bonds?

Can a depositor ever write a check on a savings account?

The close relationship of ability to read carefully and mathematical information is further emphasized when pupils are given such an arithmetic test as the following, which involves no manipulation of figures, but rather tests reading ability.

To the pupils: This is a true-false paper. In the spaces in the margin below write the word yes before each statement that you think is correct, and the word no before each statement that you think is not correct. Do your best and answer every statement. - 1. A post-dated check is one that bears some previous date. 2. In recording the amount on a check in writing, the writing should be placed very near the left end, with the first letter a capital. 8. When you wish to open an account at a bank, apply at the teller's window. 4. Amounts in currency, silver, and checks are listed separately on the deposit slip. 5. The stub properly filled out will show the total number of checks cashed to date. 6. When indorsing a check, sign your name as you usually write it, disregarding the way it is written on the face of the check. 7. To stop payment on a check, notify the bank on which it is drawn. 8. The passbook should be presented with each check to be cashed. - 9. If a check is lost, payment may be stopped by notifying the bank on which it is drawn, giving description of check. \_\_\_\_\_ 10. A passbook is issued to you when you open an account at a bank. - 11. A check should always be filled out in ink. \_\_\_\_ 12. In making out a deposit slip, the bank cashier's name is written in the place indicated. - 13. A check is endorsed in full by the payee's making it payable to the order of some bank or individual and then signing his name. - 14. Endorse a check in blank by simply writing the name

A somewhat different type of reading was done by a class in response to question raised by a pupil: "How shall the bank keep valuables safe?"

on the back exactly as it is written on the face.

This list of readings, compiled by the pupils and teachers, illustrated the sort of reading unit which such a problem stimulates:

- Pamphlet, "Better Banking Under the Federal Reserve System," Commerce Guardian Bank.
- Pamphlet, "A Catalogue of Departments," Commerce Guardian Bank, p. 14.
- 3. "Band Facts," Dime Savings Bank, pp. 11-12.
- "A Brief History of Banks and Banking," Cleveland Trust Co., pp. 6. 9. 13-15.
- 5. Other similar bank literature.
- Scientific American, October, 1923, article entitled, "Protecting Our Great Banks," pp. 222-223.
- Literary Digest, June 7, 1924, article entitled, "It's a Great Idea, But—," pp. 56-58.
- 8. "Our United States," Guitteau, pp. 333-37, 459-60, 523.
- 9. "Trust Companies," Herrick, pp. 43-44.
- 10. "History of the United States," Elson, pp. 731-32.
- 11. The World Book, Vol I, "The Story of Banking," pp. 576-85.
- The New International Encyclopedia, Banks as Lenders, p. 624; Banking in the United States, pp. 627-28.
- 13. Other good encyclopedias.

Interpreting Numbers Significantly While Reading: "Reading Mathematically." When pupils read their problems, they are inclined to neglect all but the figures involved and often must be trained to neglect the quantitative elements until their relationship is established. On the contrary, in the reading done in newspapers, magazines, etc., the reader is just as apt to ignore the quantitative terms and so fail to comprehend the full significance of the article.

A teacher gave this newspaper clipping to the pupils to read with the remark: "I want you to find out how much attention you are giving to the actual figures which occur in a current-events topic. After you have read through this short article make any comparisons which strike you as interesting."

# Summary of World Flight

History of the world flight, told in a few words, follows:

Distance: 27,584 miles.

Flying Time: 14 days, 15 hours, 11 minutes.

Speed: 76.36 miles an hour.

Start: Seattle, Washington, April 6, Sunday. End: Seattle, Washington, September 28, Sunday.

Average Distance of Hop: 488 miles. Gasoline Used: 21,060 gallons.

Spanned 21 countries, 21 states, and one territory. Four world records established.

The following test enabled the pupils to check both the accuracy of their reading and the extent to which figures are significant:

To the pupils: Choose the ending which makes a true sentence.

- 1. The average speed was about (a) 75 miles an hour.
  - (b) 175 miles an hour.
- 2. The time the men were actually flying was (a) six months.
  - (b) one month.
  - (c) one-half month.
- 3. The time the men were away was about (a) six months.
  - (b) two months.
- 4. The distance traveled was about (a) 7,000 miles.
  - (b) 27,000 miles.
  - (c) 20,000 miles.
- 5. The mileage obtained by each plane was (a) 4 miles per gallon.
  - (b) 1 1-3 miles per gallon.
  - (c) not given.

## Reading in Science

Purposes of reading in science. The general interest in science which is evidenced by school pupils, particularly those in upper grades, leads inevitably to a variety of forms of extra-class reading. In this field the reading that is done may or may not be in connection with work that is being done in the school. If it is in connection with, or because of, school work, it is a distinctive addition thereto, and it is, moreover, an evidence of the value of that school work. It forms a definite proof that at least some of the work of the school is meeting the life problems of its pupils. Even if it is not a part of the formal portions of school activity, it is, nevertheless, valuable and might, or should be, utilized by the resourceful teacher.

The reading in science may run a gamut from a most extensive form of pleasurable reading on the one hand to a most intensive type of concentrated and work-type reading on the other hand. Of these, the pleasurable form of reading is in all probability the more prevalent among adults as well as among school children. It is an evidence of a general scientific interest in an age when science is assuming an ever greater and wider relationship to daily living. There is no particular objective in this reading, save recreation.

The mediums through which it is carried on are those of the popular magazines relating to science, magazines which stress the new and which are profusely illustrated. Among these are such journals as Popular Mechanics, Popular Radio, Popular Science, and the like.

Of the more intensive forms of work-type reading, there is evidence to show that such reading is fairly widespread among children of school age, particularly among those of twelve years and older. This type of reading is motivated by some special form of interest, and the extent of the reading, as well as its value from an educational standpoint, is determined in all probability by the strength of that interest. The work of Boy Scouts, for example, particularly when that work is on a high plane, is conducive to reading of this type. Boys speak of "working" for Merit Badges in a very true sense, and the reading that is involved includes much work-type reading in science. The Merit Badges in "Electricity." "Automobiling," "Signaling," "Public Health," "Personal Health," "First Aid," and the like, necessitate a large amount of reading in science-reading that is in terms of a definite and distinct purpose. and reading that is accompanied by activities designed to make it effective. In a somewhat less extensive field the work of boys, in general, in radio serves the same end, and through this type of intensive reading many boys have acquired an extraordinarily technical vocabulary and a familiarity with scientific facts concerning radio and electricity that would be difficult to parallel in any of the school work that is done with pupils of like age. It is significant, however, that the independent reading which is thus carried on by pupils is usually reading about construction and activity; it is seldom the theoretical, textbook type of reading.

Intensive Reading Relative to a Problem in General Science

The work-type reading which pupils must do in order to solve the problems of general science is of two distinct types. First, they must be able to comprehend factual material which they read. This comprehension involves understanding the vocabulary, being able to apply principles, to draw inferences, to relate what is read to experiences, and to suggest new problems. Second, pupils must be able to read the directions of an experiment so that they may carry it out. In the illustrative material which follows, the relationship which exists between independent study and reading is demonstrated.

When material is so organized that pupils are under the necessity not only of reading but also of assimilating, when pupils must read and check their own performances, when all pupils participate actively, independent study is accomplished.

In the general plan of this course the pupils work independently through one problem and then discuss together the exercises and topics assigned. Pupils are able to accomplish varying amounts of work and the teacher is able to make a careful analysis of the pupils' difficulties and to assist them accordingly.

The general heading of the unit from which this illustration was taken is "How Our Homes are Lighted."

To the students: 10 At the beginning of each problem of this course you will find several questions and exercises. These will help you to recall what you already know. You may be asked to answer them in class or in your notebook. If you cannot do all of them at the start, do those which you can. Later you can go back and complete all of them. Most of these questions were asked by girls and boys in other classes. It will be interesting to see how many you can do before studying the unit and also to see how soon you can complete all of them.

For each problem of the larger unit which is to be solved you will find interesting reading material and experiments. The exercises at the end of each problem will give you an opportunity to show how well you understand it. When you are sure you can do the exercise, put your books away and do it.

When you have finished all of the exercises at the end of each problem. and feel sure that you fully understand the unit, prepare yourself to talk on the list of recitation topics given by the teacher. Use the blackboard to illustrate what you say or you may want to perform an experiment before the class to make your speech clear. These are for the rapid, careful students and are good tests to see if you can use the knowledge gained. These problems you may undertake in the library. at home, or in the science room after school. By completing several worth-while projects during the year you will show that you have ability to do things by yourself. Great scientists sometimes work months or years or even a life-time to solve a problem. To work for yourself requires originality, initiative, stick-to-itive-ness and ability.

<sup>&</sup>lt;sup>10</sup> These directions for study, which are mimeographed and given to pupils to read, are an adaptation of the plan used by Mr. Beauchamp in his classes in University High School, the University of Chicago. Wilbur T. Beauchamp, "A Preliminary Experimental Study of Technique in Mastery of Subject Matter in Elementary Science." Educational

Monographs, No. 24. Chicago: Department of Education, University of Chicago, January, 1923.

# How Were Electric Light Bulbs Invented and Improved? Pre-view Questions

What changes have you observed in the newest electric light bulbs? How many different candle-power bulbs are there? Why do some bulbs burn out so quickly?

In what way are radio bulbs like electric light bulbs?
What is the difference between arc lights and bulb lights?

## General Assignment

 Find out when and by whom it was first discovered that electricity would run through a wire.

"Stephen Gray," Stories of Great Inventions, Burns, p. 44. "Ben Franklin," Stories of Great Inventions, Burns, p. 46. Galvani's experiments, Stories of Great Inventions, p. 50, also encyclopedias under "Galvani."

Volta's experiments, Bedford's General Science, p. 257 and Stories of Great Inventions, p. 53, also encyclopedias under "Volta." Perform experiment on p. 362, Civio Science in the Home.

Find out why it is that electricity makes some wires red hot or white hot when it runs through them.

See the topic "Electrical resistance" in Science of Everyday Life, Van Buskirk and Smith, p. 267, also problem 18, part 1, p. 254.

Common Science, Washburne, p. 230.

Civic Science in the Home, Hunter and Whitman, p. 355.

- Find out how Edison experimented with carbon wires.
   Stories of Great Inventions, p. 121, also encyclopedias under "Edison."
- Find out why tungsten wires were substituted for carbon filaments in 1907 and since.

Civic Science in the Home, p. 248, also graph, p. 247.

#### Test

When you have read the references and performed the experiment, this test will tell you how well you have understood and remembered what you read. After you have filled in the blanks, the teacher will supply the key so that you can score yourself.

- The man who first found that silk and hemp threads would conduct electricity was ————.
- 2. The man who first found out that lightning is electricity
- The man who learned something about electricity while he was dissecting a frog was ————.

4. The man who made the first battery out of disks of metal 5. Was this a dry or wet battery? -----6. What metals did you use in making the wet battery cell? 7. What substance did you dissolve in the water? ----8. Which will heat up quicker if an electric current is sent through it, a thin wire or a thick wire of the same mate-9. What kind of metal heats up quicker than most others? -10. In order to make a wire red or white hot, do we want to make it easy for the electricity to run through it or to make it hard? ———. 11. What did Edison make his first successful filament out of? 12. What did he finally select to make these carbon filaments from after spending thousands of dollars and searching all over the earth? -----13. Carbon filaments have given way to what metal which is used most widely to-day in incandescent bulbs? ------. 14 Why is this new metal better than carbon for this purpose?

#### Topics for class reports

These topics you are to prepare for discussion before the class after you have completed the regular assignment.

- 1. Why old bulbs had tips; why they can make them now without.
- Why the wires which lead into the top of the bulb through the flat glass part are not made of tungsten.
- 3. Discuss the best kind of light for reading.
- Use the information you have gained from your reading if you care to enter the "Home Lighting Contest."
- 5. Explain to the class how to read an electric light meter.
- 6. Take a light bulb apart and explain the parts to the class.

Acquiring and testing technical vocabulary. The following test might be used as a class assignment to stimulate pupils to read carefully and to attack a definition task independently. Pupils should thus come to see that definitions are best acquired through application and use and not by means of rote memory. Such a test might also be used as a means of review.

To the pupil: There are four forces which cause things to act in certain ways. Here are the names. By reading what is told you in these

four definitions, see if you can determine the name of the force which should be written in each of the blank spaces below. You are to read and re-read as often as is necessary while you work.

- A. Gravitation is a pull force that all bodies exert toward each other; most noticeable in the behavier of small bodies toward those much larger.
- B. Cohesion is the attraction that molecules of the same substance have for each other.
- C. Adhesion is the attraction of molecules of one substance for those of another substance.
- I). Centrifugal force is the force which tends to make objects which are moving on a curve shoot off outside the curve.

Now state which forces cause the following:

- 1. The earth goes around the sun because of the balance between \_\_\_\_ and \_\_\_\_\_.
- 2. You can write on the blackboard with chalk because of
- 3. On a curve the outer rail of a railroad track is higher than the inner rail to prevent an accident due to \_\_\_\_\_\_.
- 4. It is difficult to flatten out a drop of mercury on the table because in this case \_\_\_\_\_\_ is stronger than \_\_\_\_\_.
- 5. Water wets your hand because of -----
- 6. Water runs down hill because of -----
- 7. If a whirling wheel flies to pieces, it is because . ............ is stronger than ————.
- 8. A top will keep spinning as long as the two forces and are the same.
- 9. Clothes can be dried in a whirling metal basket because of
- 10 It is ----- that gives things weight.

Now test yourself to see if you can write the definitions at the top of the page on another piece of paper.

# Industrial Arts and Reading

Types of reading in industrial arts. This is a field in which the place of reading is frequently overlooked. Too few teachers realize the importance of such reading as will supply informational background. The relationship of the workman to his fellowman; the economic status of certain fields of labor; the health, safety, and physical development of the workman—all such material should constitute an important part of the industrial arts course. That workmen should be able to read their trade magazines is an impor-

tant trade asset. The following books are given as reference books to be used by a class which is doing simple electrical repair work:

Practical Electricity for Beginners, Willoughby. Manual Arts Press, Peoria, Illinois.

Mechanics of the Household, Keene. McGraw Hill Book Co.

Electrical Construction. Timbie. John Wiley & Sons.

Automotive Repairs, Vol. II, Electric Service Work, Wright.
J. Wiley & Sons.

Building Code of the National Board of Fire Underwriters. New York.

City Building Code and the Rules and Regulations Governing Electrical Installation, Inspection Dept., City Hall.

Electricity for Beginners. Harper Bros.

Magazines, newspaper items.

Catalogues and advertising matter.

Salvage materials used for illustrations.

In addition to this reading of informational material, another type of reading must be done when pupils work from the job sheet. The use of printed job sheets became general when, during the war, workmen had to be trained quickly and intensively. The slow method of giving oral instructions to large groups simultaneously and of delaying further instructions until the whole class was ready to progress, thus gave way to individual progress which depended largely upon ability to interpret printed directions.

A typical job sheet is given here because it illustrates another possibility of the written assignments of work. Such assignments necessitate careful reading and also provide a means of the individual attention on part of the teacher and of individual progress on the part of the pupils.

## Job Sheet No. 6

# Mechanical Drafting Eighth-Grade Industrial Arts

THE JOB To make a working drawing of an object that requires only one view.

Materials Regular drawing equipment and paper.

and Tools

Procedure (Read the entire instructions and be sure you can answer the questions at the end before starting to work.)

- 1. Place paper on board, draw border lines and fill in title space.
- 2. Locate the center of the working space.
  - a. The working space is the area or space above the title block in which the drawing is to be placed. This is determined by extending the top line of the title block with the tee square to the left-hand border line and making a short line at "A," Fig. I, thus forming the rectangle ABDE. With the tee square as a straight edge, draw two diagonals intersecting at a point "C," as in Fig. I. This is the exact center of the working space.
- To plan the location of view with respect to the center of the working space.
  - a. Observe that this drawing has only one view showing length and width of the templet and that the thickness is indicated by a note.
  - b. Observe that the length of the templet is  $7\frac{1}{2}$  inches and the width is  $5\frac{1}{2}$  inches. The top line of the drawing will be  $2\frac{1}{2}$  inches ( $\frac{1}{2}$  of  $5\frac{1}{2}$ ) above and the bottom line will be  $2\frac{1}{2}$  inches ( $\frac{1}{2}$  of  $5\frac{1}{2}$ ) below the center of the working space "C." The left lobe of the drawing will be  $3\frac{1}{2}$  inches ( $\frac{1}{2}$  of  $7\frac{1}{2}$ ) to the right and left of the center "C," as shown in Fig. II. These lines will locate the position of the front view of the object that you are to draw, which, in this case, is a templet.

## 4. To Make the Drawing.

- a. Measure horizontal and vertical dimensions as indicated in Fig I, placing dots as shown in Fig. III.
- b. Draw light horizontal and vertical lines through the dots just made, as shown in Fig. IV.
- c. Complete the outline and erase all construction lines, as shown in Fig V.
- d. Put in dimension lines (how heavy?), extension lines (how heavy?), arrow heads (how heavy and where?) and figures shown in Fig. I.

#### Opestions:

Why is it advisable to center the drawing in the working space?

Why is it necessary to show only one view of the templet?

Do you think that you could make a templet for the first letter in the name of your school, from which you could cut felt letters for arm bands?

### SUMMARY

Every chapter of this report has attempted to emphasize the fact that reading is not a separate curricular activity but is a tool by which subject matter in all fields is interpreted and experienced.

This chapter calls particular attention to the intimate relationship between this tool and the purposes for which the pupil studies geography, history, mathematics, industrial arts, and other school subjects.

The difficulty which constantly confronts the teacher is to keep the reading skills sufficiently in the foreground that they may be improved and refined, yet at the same time to make them subservient to the real interests and larger purposes for which pupils read.

# CHAPTER VI

## THE RELATION BETWEEN READING AND LITERATURE

Purpose of this section of the report. As with other content subjects discussed in Chapter V of this report, the teaching of literature, in the more restricted meaning of the term, presents special problems which have to be considered in a survey of reading. Literature has in the past been most often taught by analytic methods supposedly or actually appropriate for reading as study. The chief purpose of this chapter is to present the need for a portion of the school day devoted entirely to recreational, as distinguished from work-type reading. It will include a discussion of the following points: (a) the purposes of literature in the school program; (b) the principles for selecting literature for grades and high schools; and (c) the principles of effective method in teaching literature

## I. WHAT ARE THE VALUES OF LITERATURE IN SCHOOL AND IN LIFE?

A statement of aims. Teachers have always professed to be concerned with the relation of literature to ideals and attitudes. appreciation, and conduct. Yet in reality the teaching of the subject has been chiefly concerned either with the memorizing of facts to be discovered in literature or about it, or with a narrow and coldly analytic study of the mechanism of words, rhythms, figures of speech, and like elements of structure. Dr. Hosic's study<sup>1</sup> has shown that the net result of such teaching has been loss and not gain in appreciation. All teachers should examine the accepted purposes of teaching literature as presented in that study. They should, in particular, read and criticize the stenographic reports of lessons in that book, discover their own portraits, and analyze the effect they are actually producing by their work. It seems clear from Dr. Hosic's data that the analytic study of literature which has prevailed in the past, and much of the notes, questions, and other editorial apparatus in school texts, have worked directly against our best conceived and accepted purposes of teaching this subject.

<sup>&</sup>lt;sup>1</sup> J. F. Hosic, Empirical Studies in School Reading. Teachers College Contributions to Educational Theory, Columbia University, New York City, 1921.

Literature as a means of fuller living. By viewing our problem in the light of the real purposes of literature we can perhaps get the problem in perspective. The finest and most inclusive statement of the value of literature is probably that it may make our experience deeper, wider, and more satisfying. It may help us see our own lives and surroundings as more fresh and interesting; it may also help us, by recombining the elements in our past experience, to live imaginatively in different times and countries and in characters otherwise remote from our understanding and sympathy. This is here suggested as the most basic and satisfactory statement of our aims and purposes in this field.<sup>2</sup>

That such results can indeed come from books is a matter of common experience. "When the constituents of situations are familiar, it makes relatively little difference in understanding whether one observes directly under the eyes of sense or indirectly through the eyes of language."3 Everyone who has truly lived in a great book has come to a fairer view of his own surroundings. of his own actions and motives and those of his contemporaries. "The curriculum is not books, but experiences. The educational value is always what happens in one when he reads." Through acquainting pupils with the greatest and finest sources of genuine experience during the hours of recreation and true enjoyment in school, we can surely and wholesomely stimulate their interest in the life to be lived in books and broaden their interests to include new and excellent types of experience everywhere. But such guidance, to be effective, must probably be done without moralizing and pointing out ideals; the essential point is to let the great book alone or at most constructively to help it exert its own influence upon the reader.

The revelation of the range of experience is clearly wider and deeper than appreciation of beauties of style and subtleties of rhythm which have often been the staple of courses in literature. As to developing appreciation of literature itself, we may safely assume this as an inevitable by-product and result of right attention

<sup>&</sup>lt;sup>2</sup> This point is well presented in Chapter I of Dewey's Reconstruction in Philosophy (Holt, 1921) and in Chapter XVIII of Franklin Bobbitt's The Curriculum (Houghton Mifflin, 1918). See also the study by Dr. Hosic referred to above, and Chapters I, II, and IV of Leonard's Essential Principles of Teaching Reading and Literature (Lippincott, 1922).

<sup>&</sup>lt;sup>2</sup> Franklin Bobbitt, The Curriculum. P. 226. Boston: Houghton Mifflin Co., 1917.

to the substance of literature—real experience. Such attention to the best purposes of literature in a broad sense may indefinitely extend the range and scope of pupils' interests. They may come thus to "find common elements in various lands and times, and grow to much-needed world understanding and sympathy."

How to reach the proposed objectives. Such purposes are generally accepted as valid; they appear in courses of study and in introductions to texts. Means of reaching them in detail are more controversial, and except for Dr. Hosic's work already referred to, have not been made the subject of genuinely experimental study. The points in the remainder of this chapter, therefore, and particularly those as to teaching procedures, are presented as tentative conclusions only. Save where specific studies are referred to, they attempt to give the consensus of the best current opinion, and are subject to correction as a result of valid experimentation.

It is suggested first of all that real literature is most appreciated and makes its best contribution when it is approached in a recreational mood of curiosity, and not in the way of study and work. Moreover, by the definition we have given, many records of actual experience in science and history should be included in these literature readings, as well as fiction, plays, and poetry. These are usually and rightly considered part of the work in other school subjects. But it is equally necessary to include them in the literature period for the specific purpose of extending children's range of enjoyment-letting them have various sorts of fun with their minds. Out of such reading experiences may arise many of the interests and motives on which permanent habits of reading are based. In so far as we can meet varieties of interest in this way and not compel boys who are more interested in popular science to read lyric poetry, we have more hope of developing a generation of people deeply interested in the experience to be met in books.

## II. THE SELECTION OF LITERARY MATERIALS

Types of literature. The principles for selecting books for reading and literature are treated further in Chapter VII of this report. It is here sufficient to emphasize that the enjoyment of real expe-

<sup>&</sup>lt;sup>4</sup> Franklin Bobbitt, The Curriculum. P. 224. Boston: Houghton Mifflin Co., 1917.

rience, and not any vocational or utilitarian end, should alone dictate our selection of books for the literature hour, in classroom, library or home. In fact, we shall come nearer our aim in this field, the more we stress just hearty enjoyment as our basic and central aim.

There are, however, several sorts of literary enjoyment and of books that feed such enjoyment. Five types may be cited here:

- 1. Books which are true to fact, but uninteresting save as sources for looking up facts; for example, the *Census Abstract* and *World Almanac*, encyclopedias, and most textbooks. These obviously have no claim to rank as literature.
- 2. Books that are true to fact, really interesting, excellently hand-written, as Parkman's Jesuits in America and Ernest Baynes' The Sprite. These, as broad extenders of interest through providing genuine experiences, have every right to a place in the literature period. They need the visé of subject-matter specialists—in the case of a children's encyclopedia, for example—before we accept them as accurate.
- 3. Books which are really interesting and which, though they do not report what actually happened, have the still more significant virtue of truth to human experience—which are real and true to life, though not actual. The best fiction, drama, and poetry, from Robinson Crusoe and Oedipus the King to The Mill on the Floss and Saul and Lulu Vollmer's Sun-up, satisfy these requirements. To find the books in this group which, to the pupils in our class, are real and genuinely compelling, is the major task of the literature teacher.
- 4. Those which pretend to be true to life or to fact but are neither, e. g., Curwood's Partners of the Wilds, the novels of Wright, Alger, Porter, and most of the war verse of the Vigilantes' Book. It is the business of literature teachers to discover, and by openminded discussion and comparison with reality to reveal, the hollow pretensions of such books. So long as pupils try to use the experiences these present as valid pictures of life, they are certain to misunderstand reality in one way or another; but the harm of such books is little so soon as they are seen to be untrue.
- 5. Those which make no pretense to being other than fanciful. A Midsummer Night's Dream and all fairy lore and myths—though once credited as truth—humorous stories like those told by Bill Nye and Owen Wister's Virginian, and nonsense verse, are of this type.

They are matter for hearty enjoyment; we need more, particularly, of fun and nonsense in most literature hours in the grades.

Literature for the primary and intermediate grades. The child's first story interest often lies in perfectly matter-of-fact statements of what he does every day—accounts of the actual and familiar, as in the Here and Now Story-Book. This grows later to liking of tales like Little Women and verse like Riley's. On a lower level, the literature of platitude—the local items in village papers, many magazine stories, newspaper writers like George F. Adams and Edgar A. Guest, and collectors of memory gems feed this demand constantly and flatly. The vogue of platitude indicates that people who like it have never grown beyond an early stage; they enjoy a mill-round of feeling over and over again the same sensory impacts and emotions.

The child of four or five years enjoys elements of wonder mixed with reality, but these must always be in some fashion realized or experienced if they are to have any meaning or give any pleasure. To the small child any wonder is possible, for he sees incredible things all the time about him. No deliberate suspension of belief enables him to take pleasure in the adventures of Gulliver or Sinbad or Rip Van Winkle, but whole-hearted and happy acceptance. In the primary and intermediate grades there seems to be no harm whatever in the child's delight in improbabilities; they need only be decent and not too frightful. The one essential in this period for every schoolroom is ample supplies of the best stories the children can be led to care about, and every encouragement for their free reading and enjoyment. We need more beautifully illustrated editions, a larger range of subjects, and more catholicity of enjoyment. Probably our teaching of literature has more often failed because of niggardly lack of fine materials than for any other reason. Chapter VII of this report makes possible a wide and happy choice. The range should be from the delightful nonsense of Mother Goose as far as children's tastes and interests will lead them; but it will rarely extend beyond a keen interest in incredible adventure. the fun of Lewis Carroll and "Dr. Dolittle." and the strangeness or homelikneness of child life and animal behavior in various places.5 There is rarely much genuine interest in the sort of literary staple

<sup>&</sup>lt;sup>5</sup> See the lists of materials, Ch. VII.

most frequently found in school literature-books, namely, poems of the seasons and flowerets and birdies.

As we noted earlier in this discussion, the literature courses for either grade-school or high-school pupils need to provide few or none of the usual "editions" of classics with scholarly annotations; these make a book neither literature nor anything else. It is particularly important also that the books for our reading shelves and outside reading are really attractive in appearance. The evidence so far gathered seems to show that good make-up and binding greatly increase the chances of books being read and enjoyed, and conversely that cheap and poor editions prevent excellent books from becoming known.6

Very early, children's keen interest in real things leads them naturally to question the actuality of stories. While some pupils in a class are still deep in the fairy-tale era, others may be turning disappointedly from Robinson Crusoe because they learn that it is not a "true story." We should at all times meet this question frankly, telling pupils that fairy tales and romance are, like nonsense, just for fun, that Robinson Crusoe is true to life and experience, though the adventure never really happened exactly as it is told, and that Kenlon's Fighting a Fire or Beebe's Jungle Nights is an excellent account of matter of fact. It is so essential that children come to understand and make these difficult distinctions that our business is clearly to help them every time.

The junior-high-school years: development of interest in real life. In the junior-high-school period this demand for actuality and for truth becomes especially insistent. These are years of earnest, sometimes pathetic search after the truth of experience. And here it is possible to do most harm by wrong recommendations or by failure to recommend fine and great books. Innumerable cheap stories nourish this love of adventure, common to girls as well as to boys, with impossible instead of real stories of boy vigilantes, scouts, motor girls, and desperadoes, of single-handed combats against odds, and of stupidly incredible luck. We need, of course,

<sup>&</sup>lt;sup>6</sup> Florence Bamberger, The Effect of the Physical Make-up of a Book upon Children's Selection. The Johns Hopkins University Studies in Education, No. 4. Baltimore: The Johns Hopkins Press, 1922.

<sup>&</sup>lt;sup>7</sup> Arthur M. Jordan, Children's Interests in Reading. Teachers College, Columbia University. New York City: Bureau of Publications, Teachers College, Columbia University, 1921.

to replace these with more excellent books of like appeal. One boy expressed a common opinion when he said *Treasure Island* was "like a dime novel, only better."

In particular, it seems probably that an apparent exception to our statement—the keen zest for romance on the part of adolescent children—is simply an often misdirected effort to find real experience in fields utterly foreign, to gain light upon ideals as yet misapprehended or vaguely distant. Children need far more experience of actual and achievable heroism than teachers have been giving in the dim and valorous romances of paladins and mythic heroes, far better ideals of human relations than are taught in the stories of Lancelot and Robin Hood. Like the untrue books we have mentioned, these are perfectly good so long as they are recognized as romances and not taken for reality; but we need more of reality, too, more in particular of such great stories of heroism as are presented in Duncan's Dr. Luke of the Labrador and Archibald MacMechan's Sagas of the Sea.8

Books of really vivid and true experience are often best of all, in the senior high school especially, because they may have a full measure of truth and significance and of power to build fine ideals, and at the same time they are recognizable, because of their essential truth, as possible, achievable strivings. The great biographies—as of Wilfred Grenfell and Anna Howard Shaw—and those treatments of science and history which present them as the development of human action and human thought, are above all invaluable here. Children like to read of Joan of Arc or of Captain Scott, for example, because we all admire the heights of courage to which human beings can rise.

Interest in human nature and human relations. Out of children's interest in types of goodness and badness in fairly tales and breathless adventure stories, through the appreciation of individuality of character in Stevenson's and Dumas' romances, another interest grows toward maturity—young people's concern with human nature and human relations. This is developed, beyond mere story-interest, through the curiosity about reality which becomes strong in the junior-high-school period. But in these years this concern is to be touched only lightly and casually; it must not be forced in the

J. M. Dent & Sons, Ltd., London and Toronto.

reading of literature or it is lost. Interest in other people as individuals is a slow-growing, rather adult preoccupation. Its culmination is the absorption in biography and memoirs, and the interest, by middle-aged people who can read and think, in character portrayal by Eliot, Shakespeare, Galsworthy, and Conrad. In much the same way people turn to lyric poems for the best expression of human feelings in the face of crisis or beauty or to renew their sensibilities of what is about them. All people are more or less intelligently interested in human nature and its meeting of circumstances difficult or tragic, in the play of cause and effect in human actions.

Such concern begins naturally and unforcedly with observation of curious persons in street cars or ten-cent stores. We should then parallel it in the best books that adolescent children can understand or care for, and develop it to the full. Such reading is related closely to widening ideals and to gaining intelligence in relation to life and fellowmen.

Truth, significance, and realizable experience. Humor and fancy, then, children learn gradually to discount as unreal; but we all go to these for enjoyment and the wholesome relief of turning away from reality occasionally. Provided one is perfectly sure of what he is doing, this is quite all right. Aside from this province of romance, however, if we would make our teaching of literature of utmost value in the enrichment of experience, teachers need to hold, in the selection of books particularly for high-school children, to the principles of truth and significance. If the books we give pupils are not true to experience, it is necessary to realize this frankly and to help them to do so. From the feeble romances of Curwood and Wright, Myrtle Reed, and Gene Stratton Porter, the worst harm can be rooted out if only we lead pupils to see that they do not truly picture cause and effect in human affairs.

As to significance, it matters greatly that the writer help us see something new or see the familiar in a new aspect. The book that makes people angry, as Arnold Bennett points out, is very often the good book which has made them feel and think unwontedly. Main Street may be closer to journalism than to literature, but it has present value and importance in so far as it has made people

S. A. Leonard, Essential Principles of Teaching Reading and Literature. Chs. I-VI. Philadelphia: J. B. Lippincott Co., 1922.

view their own villages and the small town of traditional literature with a different eye. We can follow these essential principles of truth and significance, and in knowledge of children's nature and needs, select those books which are of real worth to them because they can themselves build up afresh and enjoy the experiences. Thus our literary selections will be of worth and importance.

In summary, we need in the high school, as in the grades, very much more of real literature and fewer "books about books" and other mere texts. We need more books of genuine interest to children and fewer romances and character studies and books of adult nature-interest, particularly in the lower grades and the junior high school. The character of children's choices is very well reviewed in the recent articles by Miss Mackintosh, 10 Miss Garnett, 11 and Dr. Lyman 12 in the Elementary English Review. Dr. Cavins 18 study particularly shows clearly that general practice places poems from one to three grades too early in the curriculum.

# CLASSROOM PROCEDURE IN THE TEACHING OF LITERATURE

An essential condition of literature teaching. In the literature classroom everything is to be done which actually tends toward the fullest and most vivid realizing of experience, and everything is to be excluded which has to be justified alone by its supposed value as information to be remembered, or the like. Probably more harm has been done in literature than in any other subject by the mistaken zeal to secure memorized facts. The essential principle here has been well stated in the discussion of the teaching of reading in the intermediate grades: "The fact should be emphasized that when reading occurs in connection with a class activity, the reading process itself is of secondary importance. If pupils encounter difficulties, they should be given at once whatever

<sup>&</sup>lt;sup>10</sup> Helen K. Mackintosh, "A study of children's choices in poetry," The Elementary English Review, 1 (May, 1924), pp. 85-89.

<sup>&</sup>lt;sup>11</sup> Wilma Leslie Garnett, "A study of children's choices in prose," The Elementary English Review, 1 (June, 1924), pp. 133-137.

<sup>&</sup>lt;sup>12</sup> Rollo Lyman, "What poetry shall we teach in the grades?" The Elementary English Review, 1 (June, 1924), pp. 145-154.

<sup>18</sup> L. V. Cavins, Grading Poems for School Use. An unpublished doctor's thesis. Department of Education, The University of Chicago.

<sup>14</sup> Quoted from another chapter of this Yearbook.

help is needed that the activity may go forward. A record should be made of the types of difficulties which are revealed and special help provided later during regular reading periods."

The same thing holds true of the usual zeal of teachers and textbook editors to cumber the pursuit of genuine experience, valuable in and for itself, with the misapplied purpose of inculcating facts as to dates and sources and matters of scientific or historical exactitude. The more surely we can eliminate attention to the technique of reading and to irrelevant data of other subjects of study from our literature hour, the more we shall be able to accomplish our purposes for that period. This does not deny the obvious fact that one must learn to read literature. As has been noted, the story which treats of character is so different from adventure tales that the approach to it must be quite distinct. So, too, the reading of lyrics is an adult experience which one must grow into. Reading a play and truly visualizing it is, as Stevenson has said, as hard as reading a score in music. If pupils are to learn any of these things, we need to help them do so, but this we can do only by centering upon the essential principle suggested above. Everything which contributes to the creative realization of experience, and nothing else, is to be justified.

The reader's purpose. Any procedure in literature periods needs to be judged in view of the purpose and value of a particular book or selection. In recreational reading of Fabre's account of the Lycosa spider, the reader's purpose should be to see and realize what the author presents, not to memorize his facts or the subclassifications of spiders. In reading a vigorous tale of adventure, the whole procedure should be in keeping with the swift pace of the story, unhindered by any considerations whatever of character study or theme or moral.

When the central idea is essential, coming at and understanding that purpose or idea should be the final objective. In *Ivanhoe*, for example, out of the pageants of fight and tourney should emerge the idea that here is a story of Saxons and Normans finally settling down in unity together. This children can be helped to work out for themselves, and we should then let it alone. So with *Silas Marner*, in the senior high school; the book is not fully mastered until, from all its picturesque, vivid happenings, the author's central theme

emerges. The reader must get the idea for himself. But books with clearly defined themes which are really adapted to the junior high school and the grades below it are rare indeed. Mostly the story, the action, the colorful, living experience is the thing, and teachers have done their part if pupils join in "sensing" it happily, without any further stress of facts to be remembered or ideals to be formulated.

The enjoyment of literature in primary grades. In the first six grades the principal objective should be the cultivation of habits of real enjoyment of books. Here is no place whatever for consideration of style or structure or for anything save the happy pursuit of experience for its own sake. It is pretty plain that this end can be most fruitfully begun by excellent reading aloud, either by the teacher or happily and spontaneously by those pupils who enjoy a book or selection and want to share their enjoyment. The perfunctory reading as a class requirement which has most often characterized literature periods is unquestionably a tremendous bar to any true appreciation. The point is well taken that pupils appreciate a good piece of literature better when they really interpret it to others; but it is equally true that they cannot interpret it until they have themselves in good measure understood it and cared for it. This essential has been most often overlooked in school reading.

Moreover, since adult reading of literature is most often silent reading and we want to help children to do that well, so most recreational reading in schools may well consist of enjoying books, each pupil with his own, reading silently save for pleasant chuckles or an irresistible desire to show some good bit to a friend or teacher. Where the approach to reading is normal, this silent reading will begin very early, and it should be the prevailing type of literary enjoyment, save where help is actually needed to interpret and realize what is presented, and this more often at the request of pupils than on the initiative of the teacher.

For that literature which is concerned with emotion and beauty—poetry, particularly, and poetic prose—good oral reading is one route to natural appreciation. In the early grades at least, as in a measure throughout the grades and the high school, reading by the teacher is the medium. Wherever children feel and enjoy a vivid or beautiful or funny experience, oral reading, always one

of the best forms of expression for their feeling, should constantly be stimulated and developed for the genuine purpose of sharing pleasure. 15 This is the chief place for oral reading in schools to-day.

Children in the University of Iowa elementary school heartily and joyously sing old English ballads. The selection is made up for the most part from their own spontaneous asking for those they have most enjoyed. Here, again, admirable informal teaching of literature is done. So, too, where children dramatize in their own way the small stories that they like best, we have everything that is needed for our purpose. 16

A good picture of happy, spontaneous enjoyment of literature is to be found in Dorothy Canfield's Understood Betsy, Chapter VII, where Betsy reads "The Staggit Eve" in the farm kitchen. There is no unnecessary intrusion of tacts or details-perhaps less than we might well justify; but there is a clear sense of the experience the author wanted to present, and that is the one essential. Reading aloud, in fine, should be without any comment not genuinely contributory to the experience desired. Whatever class discussion occurs must never be in the form of recitation designed to test whether pupils have studied the assignment;17 it should never be the giving of predigested information by the teacher. It must always be a sharing of real experience. In so far as we meet this condition, we achieve the end of all teaching of literature. So when a class of city children pool into the common fund their experiences on a farm, with diagrams and graphic comparisons, so as to see the pictures and feel the whole of the experience in Snowbound, we have a genuine literary experience and very real enjoyment. That is the end and purpose of our work. One caution, however, is essential here: this does not mean teaching and insisting on boresome details of long "literary" descriptions The best descriptions are short. in Homer and Tennyson, for example; poor descriptions are dull and long, 18 and should be skipped without hesitation.

<sup>15</sup> Emphasis on this point is given in a thesis by Principal Reinhardt Ruhnke of Mineral Street School, Milwaukee, in preparation at the University of Wisconsin, entitled "Investigations into the Subject of Reading in the Milwaukee Schools."

16 See Caldwell H. Cook, The Play Way. London: Heinemann and

See Caldwell H. Cook, The Play Way. London: Heinemann and Co., 1913. New York: Frederick Stokes, 1917.
 See Ch. IX.

<sup>&</sup>lt;sup>18</sup> Allen L. Carter, "Did Lessing say the last word on description?" English Journal, 13 (June, 1924), pp. 896-401.

The basic principle of literature teaching. All this may best be summed up in the principle: The approach to literature for real experience and enjoyment must never be analytical and critical: it must always be co-operative, creative; it must be the reader's attempt to put together out of his own past experience those pictures and sounds and odors the writer presents. Very rarely has classroom literature-teaching centered on this aim. Unless it does. teachers will continue to develop distaste for genuine literature and turn pupils back upon the cheap and shoddy. The real "books for all time." even when we succeed in selecting among them those that fit children's ideas and interests, are harder to assimilate than the poor, obvious stories—the thrillers and soporifics. We must not get in the way of the best books with quizzes and annotations on irrelevant details; rather, we must join sympathetically with children to help them live into new experiences and to get from them what is vital and rich for each child's growing and expanding needs.

It is important to develop speed and delight in the reading of literature, particularly in the earlier years.

Literature in the junior and senior high school. There is no essential difference to be observed in the teaching of literature in the junior high school from that in the intermediate grades. Both should lead to "experiencing literature," in the best sense of the word. Children's interest is still chiefly in simple adventure and humor and homely everyday happenings. A growing search for reality, suggesting a change of emphasis in selections used, requires a greater wisdom and finesse of approach in the junior-high-school years. It is at this point that books of cheap adventure can most easily be 'scotched' if we help children to see their impossibility. At the same time we must not mislead into belief in incredible romance, these searchers after reality and genuinely realizable ideas.

It has been suggested that interest in other people first appears as a definite and distinguishable motive in the junior-high-school years. Pupils like to note Jim Hawkins' misreading of the character of the one-legged sailor. They observe and enjoy various opinions—his wife's and the children's—of Rip Van Winkle's character, and laugh at the greed and cowardice of Ichabod Crane. They sometimes like to discuss these points—but not at length—speculating what the characters would do under this or that situation, discussing

whether they are likable or admirable. One small boy, speaking of Godfrey Cass' guilty dilemma, said: "Yes, I know just how he felt." All of this is the finest and most direct route to appreciating one's own experience, which is one significant aim of literature.

But teachers probably make a great mistake when they force this note. They should let such interpretations grow, enjoy all they can of children's frank discussions; join in, but never dominate with their own ethical theses. 19 Again, they need to help in creative realization and to keep away from analysis; otherwise, they often stop this desirable growth toward real appreciation of character and conduct, which is the purpose and concern of much of the finest fiction and drama and poetry.

Even more does the caution against miscroscopic analysis apply to the consideration of style and manner. Scholars rightly care much for these considerations. It is doubtful if such appreciation is fundamental to the dominant purposes of literature in schools. Even in the senior high school there should probably be little, if any, attention to form or manner, save for those pupils who want to write poetry or stories themselves. The chief place for study of style is clearly in elective courses in literary composition or in other classes as optional assignments for those interested.

When, in reading a Shakespeare play or a Norse story, something of the background will help in realizing and living the story, such matters may be presented briefly, or good readers in the class may look up and report on a few essential details. So for biography of writers and the history of literature and literary types. Very little of this is ever genuinely relevant to the main purpose of literature. Its chief value is in elective study of literature in college. If the historical treatment is left strictly subordinate to a sense of the experience, made in itself to contribute to that experience, it will do little harm. Usually it has appeared to stand between pupils and great books and obstructed their way.

Composition for developing the purposes of literature. The best appreciation of what literature genuinely is often comes from doing with our own experiences and imaginations the same thing as the author did with his. Little stories of adventure, humor, and nonsense,

<sup>19</sup> A. G. Fairchild, The Teaching of Poetry, pp. 108 f.and 184 ff. Boston: Houghton Mifflin Co., 1917.

homely every-day happenings, fancy, and imagination-all that touches the pupil's own life and experience—are the materials for his attempts to share his enjoyment or excitement. Any normal child can be helped by genuine co-operation and encouragement to find in his own days the most interesting things to tell about. If he has a stimulating subject, one that is "personal, definite, and brief." any child will try happily to create from it something of his own. "Nature provided for the communication of thought by planting with it in the receiving mind a perfect fury to impart it." Provided a pupil is given opportunity to read many stories, he will naturally, in meeting his own problem, try the methods they suggest. It is doubtful whether teachers should ever assign-certainly they should never require—the imitation of any piece of writing. Rather, they should provide the greatest possible variety of experience and of modes of expression for the encouragement of children's small and simple attempts at literature. Where the dominant motive is the realization of experience, any procedure is usually right.

Book reports and credits for outside reading. From the primary grades to the high school, we have suggested the necessity of having in every classroom book tables and shelves with the best possible literature for children to enjoy in the form of supplementary reading. Under right conditions, books from home and perhaps occasional magazines should be welcomed to these tables, since it is important to help pupils evaluate the writings that they will meet outside the classroom. But the teacher must evaluate all contributions, and occasionally should exercise the veto for a definitely worthless book or story. A generous widening of interest is always better than close limitation to a book list, though the book list should be provided also.

Books should be avaliable to take home, and the privileges of the book table should be extended, as fast as possible in the grades, to those who have demonstrated their ability to read. An excellent treatment of this is presented in an article by Miss Zirbes.<sup>20</sup> It has been mentioned already in the report on intermediate-grade reading that if pupils are keenly interested in good books and selections, there is little or no need of imposing artificial checks to

<sup>&</sup>lt;sup>20</sup> Laura Zirbes, "Diagnostic measurement as a basis of procedure," Elementary School Journal. 18 (March, 1918) 505-522.

determine the thoroughness of their reading. It may be added that the good reader is almost without exception honest in these matters; he does not need nor care to cheat.

Those who read slowly and with difficulty, on the other hand, need special encouragement. They need to be given books that are easy for them, in which the swiftly moving action impels them to greater speed. These same pupils also need checks upon their understanding; but such checks need never take the form of the inquisitorial book review which demands the summary of the story, a life of the writer, etc., ad nauseam. It is easy in the reading period, whenever necessary, to check a pupil's reports by one or two questions only. One may, for example, read a brief passage and ask what happened next in the story, or may ask for an opinion on the hero's solution of a given problem.

Good types of book report. Two different types of report are really useful. The first is the pupil's personal reaction to the book, his opinion of what it made him think about or what he particularly liked in it. These should be definite, individual, usually brief. Sometimes pupils regard such reports as private and personal communications to their good friend, the teacher, and such preferences should be respected

The socially more useful type is the promotive book report, in which the pupil, perhaps in three or four sentences only, gives his statement of what kind of book he reads and what he particularly recommends about it and illustrates by a quotation or an example. An excellent use of such reports is given in Miss Anne T. Eaton's article.<sup>21</sup>

Many teachers like to stimulate outside readings by a system of points, or credits. Mr. Blandford Jennings, of the East High School, Green Bay, Wisconsin, has an ingenious system of requiring for credit in outside reading the achievement of three fourths of the class median in points, and of giving additional credits for reading in excess of the reading median. Others prefer to give complete

<sup>&</sup>lt;sup>21</sup> Anne T. Eaton, "How the English department and the library can co-operate for the whole school." *English Journal*, 9 (December, 1920) 570-578.

<sup>&</sup>quot;The Lincoln School Library." Teachers College Record, 124 (January, 1923) 7-25.

freedom in this respect and simply point out to laggards that they are not coming up to a reasonable standard.

Examinations and tests in literature. Like book reports, examinations on literature need rarely be inquisitional. The best questions are probably those which can be answered with books open—which, like the best reading tests, center on understanding and not on memory. And those questions<sup>22</sup> should never be upon minutiae—upon supposedly useful information rightfully belonging to science and history—but on central ideas and main currents of thought. It is particularly important that opportunity be given for varieties of judgment and opinion, provided these are supported by references to the books themselves. Such tests discussed freely and immediately, bring about the finest kind of classroom conference on literature.

It is important to emphasize also that the objective to be worked for is the pupils' own reaction to what is presented, their relating it to their own experiences and making genuine new experiences and thought out of it. For this purpose repetition of other people's critical opinions has little or no value. The development, checking, and refining of pupils' own thought best builds their appreciation of experience.

Examples of good and bad teaching of literature. As a summary of this treatment of literature, there are here presented, in inadequately brief fashion, contrasted examples of probably harmful and of excellent procedures in teaching literature in various grades. These illustrate briefly the main principles here assumed for reaching the objective of literature as a contribution to fuller living.

In the primary grades, pupils' reading aloud in execrable fashion while all have books before them, and the waste of time on stupid verse and prose like "Little Pearl Honeydew" and "The Character of George Washington," represent the worst abuse of the literature hour. When poignant verses of adult suffering like "Little Boy Blue" are used with little children, still another sort of harm is done, if the poem happens to mean anything to the pupil.

On the other hand, the true teacher of primary literature reads

<sup>&</sup>lt;sup>22</sup> A discussion of the use of true-false tests, with many illustrative questions, appears in the *Illinois Bulletin* for May, 1923, and for January and April, 1924.

Jabberwocky or Dr. Dolittle aloud and joins in the enjoyment, or gets pupils to tell small incidents of their own experience that make Peter Rabbit's adventure more real and exciting to all the class. She baits the reading table with attractively-bound picture books ranging from the Railroad Book to Alice in Wonderland. All look forward to the literature period as one of free delight. There will often be dramatizing of stories just as the children see them.

In the intermediate grades the formal reading in turn from books which all pupils have before them, stopping to look up in the dictionary unimportant words which should be ignored or briefly explained, and the intrusion of facts to be memorized and recited, destroy the illusion of experience to be built up. No eye is on the literature, but on the symbols and irrelevant appurtenances only. Teachers must not attempt to make literature a hard study like mathematics. On any level except in elective courses for specialists, it must be an enjoyable, free experience if it is to have its good effect. It is sufficiently difficult to expand and deepen experience, even when no artificial obstructions are set up.

Here should be continued reading aloud by the teacher, perhaps with comments of wonder as to what will happen next, and incidental explanation of troublesome words or answers to children's questions. This especially will mark the beginning of new stories and the attack on poems as yet beyond the pupils' independent powers. There will be no recitation of memorized facts. The test of whether things are understood can be readily enough accomplished by much more economical means than the waste of class periods in this fashion. Discussion will be really discussion, the asking of questions which pupils want answered, the presenting of various explanations, and, above all, supplementing the story by incidents out of their own experience—"reading between the lines," as Lyman well terms it.28 There will be very informal dramatization and reading aloud by pupils of selections from stories or of verse which they like and want to share. There will be much free silent reading in every class. Informal tests of grasp of the story and informal book reports on outside reading will furnish what check is needed on the understanding of books read independently.

<sup>22</sup> R. L. Lyman, "The teaching of assimilative reading in the junior high school," School Review, 28 (Oct., 1920) 600.

The same pictures, essentially, depict literature hours in the high school. Stern questions on the biography of the writer, the editor's introduction and notes, the dates mentioned, the exact geographical location, the classification of plants and animals, and above all the formal definitions of words—all this stops interest in good literature, perhaps for all time.

Dr. Crothers suggests that teachers, in fear that literature is too easy to be disciplinary, have built barbed-wire entanglements about it. Literature is not too easy; to realize and live again an author's experience is a difficult feat, and we need to help, not to hinder. It is particularly necessary for this purpose to postpone for some time the heavier literature which we have forced down several grades below where it belongs. One teacher spends a class period having pupils look up all the polysyllabic words in two sentences of Rip Van Winkle. Another has pupils read, perfunctorily and needlessly, five lines in turn without relation to thought division. A third prescribes the gestures, movements, and inflections for a formal dramatization as if by puppets. Still another spends a deadly dull hour in hearing recited the names of Anglo-Saxon writers, their works and dates, or secures piecemeal, fragment by fragment, a reproduction of what all have read silently.

The true class in literature has none of these characteristics. Where necessary, the teacher may introduce pupils briefly to the time or mood or author of the story; but this introduction, to be good, must itself be real literature, and that is a hard requirement. The teacher, as leader of the group, may spend five minutes in a brief, objective test of whether pupils understand what they have read, and as much time as necessary in discussing the answers and allowing as correct all that the pupils can support sensibly by references to the book. He may call for volunteers for oral reading or reciting of selections which most of the class do not know, but which one pupil understands and enjoys, or of parts in plays, and may allow brief discussion of how well the reading is done. He may, perhaps, in the senior year of the high school, help set in perspective those authors and writers with which the class are familiar by assigning, and helping to make, a chart or diagram of the centuries in which they appear. Above all, by stimulating discussion, he will help give reality to the living experience the writer presentedmake it so far as possible a colorful, vivid pageant of experience; and he will then direct attention to the central idea or theme of the whole, which gives it artistic unity. By such means he can contribute to literature as a means of fuller living, and get, as fine by-products, a genuine appreciation of literature and a growing, because unforced, criticism of life and conduct on the part of his pupils.

# CHAPTER VII

# APPROPRIATE MATERIALS FOR INSTRUCTION IN READING<sup>1</sup>

The purpose of this chapter is to recommend the types of materials which seem most likely to facilitate the accomplishment of the purposes set up in the other sections of this Yearbook. Part One deals with the general requirements which should be met by reading materials. Part Two makes more specific recommendations for each of the periods into which instruction in reading is divided.

#### PART I

## GENERAL CONSIDERATIONS TO BE KEPT IN MIND IN SELECTING MATERIALS FOR THE COURSE OF STUDY IN READING

These considerations will be discussed under three headings:

1. The materials needed for recreatory reading. II. The materials

¹Acknowledgment is gladly given to the various book companies, public school supervisors, librarians and teachers of education who assisted in the preparation of the list of books in this chapter. Special acknowledgment is given to Maude McBroom, Mabel Snedaker, Elizabeth Luzmoor, Ruth Moscrip, Wilma Garnett, Elsie Lorenz, Edna Wiese, Emma Watkins, Frances Hungerford, Hazel Prehm, and Bernice Orndorff of the Staff of the University Elementary School, State University of Iowa; to H. C. Hill, R. L. Lyman, Katharine Martin, Marjorie Hardy and Florence Williams of the University of Chicago; to Alma B. Caldwell, Assistant Superintendent, Cleveland, Ohio; to Mrs. Theresa Elmendorff and Miss Evans of the Buffalo Public Library; to Eleanor Troxell, State Normal School, Bloomsburg, Pa.; to Dr. W. L. Uhl of the University of Wisconisn; to W. W. Theisen, Assistant Superintendent of Schools at Milwaukee, Wisconsin; to Frances Dearborn and Hazel Aldrich Finegan, supervisors at Los Angeles; to Annie McCowen and Mrs. Ernest Horn, graduate students in education at the State University of Iowa; to Miss Eaton of the Lincoln School, Columbia University, and to the following kindergarten teachers and supervisors: Henrietta Harkin, Cedar Rapids, Iowa; Bessie Park, Des Moines, Iowa; Ircne Hersch, Drake University, Des Moines; Miriam Hoover, Ft. Dodge, Iowa; Lura Whitney, Toledo, Ohio; Mrs. Mary Boomer Page, Chicago; Edna Baker, National Kindergarten and Elementary College, Chicago; Edna Baker, National Kindergarten and Elementary College, Chicago; Madeline Veverka, Los Angeles; Annie E. Moore, Columbia University; Ella Ruth Boyce, Pittsburgh; Lucy Wheelock, Wheelock Training School, Boston; Stella Wood, Minneapolis; Edwina Fallis, Denver; Genevieve Lyford, State Teachers College, Greeley, Colorado; Sophie Borup, St. Paul; Elizabeth Hall, Minneapolis; Stella McCarty, Goucher College, Baltimore; Helen Christianson, Los Angeles; Juha Wade Abbot, Philadelphia; Dorothy Hamilton, State Teachers College, Cadar Falls, Iowa; Lucy Gage, Georg

needed for silent reading of the work type. III. Those special pedagogical materials needed in assisting the child to acquire the various fundamental abilities in oral and silent reading.

## I. MATERIALS NEEDED FOR RECREATORY READING

- A. Types of Situations in which Materials are Needed.
- 1. For class exercises in oral reading and in other study of literary selections. For these purposes, one or two complete sets of literary readers should be bought so that each child may have a copy. In addition, a smaller number of duplicate copies of several titles should be bought for use in small groups and in dramatization.
- 2. For the entertainment of the class by one pupil. For this purpose one book of a kind is sufficient. Under such a plan the reader has a motive for reading, and the audience has a motive for listening. The much-sought "audience attitude" is difficult, if not impossible, to get when members of the class who constitute the audience have in their hands the selection which a pupil is reading to them.
- 3. For independent or free silent reading. For this purpose it is highly desirable that single copies of a number of books be purchased. For the price of one supplementary set of books in duplicate it is possible to buy one copy of each of a number of valuable titles.
- 4. For singing poems to which good music has been written. In the primary grades, for example, there should be books containing the music to Mother Goose rhymes; in the intermediate grades, books containing the music to the most popular singing games and ballads; in the upper grades, books containing the music to the poems of such poets as Burns and Tennyson; and in the junior and senior high school, books containing the music to songs in Shakespeare's plays.
  - B. Criteria for Selecting Materials for Recreatory Reading.

The list of books for recreatory reading should meet several requirements, the most important of which are listed below. Some of these requirements apply to library lists; others to individual books.

1. It should contain books of undoubted value. The following classification, based upon the discussion elsewhere in this Yearbook,

may prove helpful in determining the value of a book in recreatory reading:

## Types of Books Used in Reading

- a. Those which are true to fact but uninteresting except for purposes of special reference. Example: The World Almanac.
- b. Those which are true in the sense of reporting actual happenings, interesting, and excellently written. Parkman's Jesuits and Chapman's Travels of Birds are good illustrations of this type of book.
- c. Those which are true to life and interesting, even though they do not report what actually happened. The best types of poetry and of fiction satisfy these requirements.
- d. Those that pretend to be true to life or to fact, but are neither. Much of the fiction written for children is of this type.
- e. Those that make no pretense of being other than fanciful. Fairy stories, nonsense jingles, and wholesome humor are of this type.

It is obviously futile to apply the same standards in judging all of these types. Each has its appropriate standards. Books of type d have no place in the school library. Books of types b and c will constitute the bulk of the list to be used in recreatory reading. However, humor and nonsense should have a much larger place in grade lists than at present.

- 2. Only such materials as are within reach of the child's imagination should be selected for a given grade.
- 3. The materials selected must appeal to the immediate interests of the child. This does not mean that the child's likes should be substituted for literary worth as a criterion for selecting books. It means that from among books of value, those should be chosen which make the strongest appeal to the child. Beginnings have already been made in determining children's interests, in such investigations as those by Dunn, Jordan, Uhl, Knight, Mackintosh,

and Garnett. A detailed bibliography of these investigations is given on pages 173-175.

- 4. There should be a wide range of selections.
  - a. As to experiences. Since one of the purposes of recreatory reading is to enrich experiences, it is desirable that books which are selected for a given grade should represent every type of wholesome experience within the range of the appreciation of the pupils of that grade. In making these experiences vital, every suitable literary type should be employed. School libraries are commonly deficient in short stories, in humor, and in well-written books in such fields as history, science, and industry, as well as in poetry which appeals to children.
  - b. As to moods to which the selection appeals. Studies of children's choices seem to show that we should greatly increase the amount of humor and wholesome nonsense. Selections which are exciting should also be included in greater numbers than has been the custom. Children's great interest in literature of a patriotic nature gives a special opportunity to introduce books which show truthfully the struggles and sacrifices of their country in achievement of its ideals. However, this interest should not be exploited by 'palming off' on children selections of inferior worth.
  - c. As to countries and peoples. By the end of Grade VI, each pupil should have read at least one selection, in translation, from each of the other great literatures, in addition to those from American and English literature. What is advocated here is not a survey course in world literature; it is the development of a broader insight into the experiences and aspirations of other people.
  - d. As to difficulty. One of the best aids in providing for individual differences in reading ability is to have, in each grade library, books difficult enough to offer an adequate challenge to the most gifted pupil in the

room, and other books easy enough to be read with satisfaction by the poorest reader. If this requirement is met in selecting not only books for recreatory reading but also books for the work type of reading, an important step will have been taken in adapting the course of study to the needs of individuals.

- 5. The illustrations should be good. Criteria for judging the illustrations in children's books have never been definitely established but it seems helpful to ask the following questions:
  - a. Do the illustrations have real art quality?
  - b. Do the illustrations appropriately convey the thought expressed in the text?
  - c. Are the illustrations of the type which children understand and appreciate?

The first question should call attention to such matters as arrangement on the page, good drawing, and harmony of line and color. In some books for young children the illustrations are too elaborate and are sprawled over the pages in a most disorderly fashion. Many of the illustrations show inferior drawing. Good line, good drawing, good color and composition as elements in illustrations undoubtedly contribute to setting up standards of good taste.

The second question is important in all book illustration. Children are particularly disappointed when the pictures do not tell the story properly.

The third question cannot be definitely answered until there has been more investigation. It has been fairly well established that little children do not care for pictures with complicated line and color. They prefer a flat pattern-like treatment. The child's taste is apparently different in this respect from that of the adult. The illustrations in many recent children's books have a greater appeal for adults than for children.

In the early grades two precautions are especially necessary in placing illustrations in relation to the text. First, they should be so placed that the thought stimulated by them will transfer most effectively to the text to which they refer. Second, they should not break up the lines on a page.

6. The mechanical make-up of the book should be attractive and should, so far as possible, duplicate the make-up of books which people cherish for their libraries outside of school. It is quite possible that there should be eliminated from all pages the clutter of pedagogical suggestions, almost always unnecessary and often positively harmful. If notes, glossaries, or explanations are necessary, let them be put in the back of the book. Such studies as that by Bamberger<sup>2</sup> make an important beginning in setting up standards of binding, size of page, etc.

There is a special need on the part of school people to demand strongly more attractive and more durable bindings. The lack of durability in most high-priced illustrated books for children is inexcusable. Compared with school texts equally well illustrated by artists of the same ability, these books are usually miserably bound. This is in spite of the fact that they cost, page for page, much more than class textbooks furnished to public schools. Books meant for very young children are especially deficient in durability. Many popular, but poorly bound books are now rebound in attractive and durable form by the H. R. Huntting Co., of Springfield, Mass., and sold at a very moderate increase over the price of the original bindings.

Many primers and first readers are at fault in the arrangement of lines on the page. All lines, except for paragraph or outline indentation, should begin the same distance from the left-hand margin of the page. With the exception of the last line in a paragraph, the lines should be approximately the same in length. We do not yet know the effect of breaking a phrase at the end of a line. It seems possible that this should be avoided whenever practicable, but certainly there is no excuse for the variegated designs which the lines make on the page in many books.

There are at present no data on children's reading which enable us to say with assurance that lines should be short rather than long, or that sentences should be artificially short rather than long. Until better data are obtained, it seems safer, in judging books for children, to be guided by the requirements of natural, effective presentation.

<sup>&</sup>lt;sup>2</sup> Bamberger, Florence E. The Effect of Physical Make-up of a Book Upon Children's Selections. Johns Hopkins University Studies in Education, No. 4. Johns Hopkins University, Baltimere, Md., 1922.

### II. MATERIAL NEEDED FOR THE WORK TYPE OF READING

This type of material should be differentiated as fully as possible from that classified as recreatory. Chapter VI of this Yearbook shows the need for making this distinction.

It seems to follow logically that since materials of the work type are to be used to develop ability to work with books, these materials must duplicate the essential characteristics of the various types of books with which people work, and should aid in developing the most important abilities needed in such work. The four classes of abilities needed in working with books are: the ability to locate information bearing on the reader's purpose; the ability to comprehend, appraise, and select information with reference to that purpose; the ability to organize material read under the guidance of that purpose; and the ability to decide what should be remembered, and to memorize this essential material.

# A. MINIMAL EQUIPMENT REQUIREMENTS FOR DEVELOPING THESE ABILITIES

- 1. For class exercises in teaching children how to work with books. One or two complete sets of silent readers of the work type should be bought so that each child may have a copy. In addition, a few copies each of a number of different silent readers or of supplementary informational books should be supplied for work with small groups.
- 2. For use in carrying over into other subjects the skills and attitudes developed through the use of silent-reading textbooks. The minimal requirement for an elementary school in this respect is an adequate number of dictionaries, at least one child's encyclopedia such as Compton's, plenty of special reference books with good indexes and good tables of contents, and general references such as the World Almanac. These materials are necessarily factual in nature, as contrasted with those used in recreatory reading. As the pupil advances through the grades, he should be confronted with progressively more difficult materials which have all the common and essential forms of the various types of books with which one works. In any grade where class drill is recommended, as, for example, dictionary drill in Grade IV and beyond, there should be

enough books so that each child in the practice group may have a copy.

Too much emphasis cannot be placed upon the importance of an adequate supply of varied reference materials. Such books should be used, not merely in connection with silent-reading periods, but also in the study of other subjects. The use of many books aids the development of all the four types of abilities which are listed above. It trains the child in finding and assembling books which bear on his purposes. The use of a variety of references is one of the best devices to break down the habit of mere mechanical reading of words. A variety of books is also necessary for a complete training in ability to organize. After a student has been taught to organize the thought in a single selection, he must have training in assembling data from a variety of books. Assignments to many sources of information are necessary to avoid mere rote memorizing and to develop the ability of intelligent selective memorizing.

As will be shown elsewhere, each classroom needs not merely complete sets of these supplementary books of an informational nature, but also a considerable number of individual copies of books which deal with special phases of the work in such studies as history, geography, nature study, and hygiene.

# B. CRITERIA FOR SELECTING READING MATERIAL OF THE WORK TYPE

One of the most important results of experiments in silent reading has been to show how textbooks for children can be improved. Many times, when children are tested on their ability to comprehend a given selection, one is left in doubt as to whether to charge the low comprehension score against poor reading ability on the part of the pupils or against poor writing ability on the part of the author of the selection. Textbooks in geography and history are often so abstract and barren of detail that no child can be expected to understand them. Direct and indirect experimental results seem to lead to the following conclusions:

1. While it is impossible to overemphasize the teaching value of authentic narrative and incident, it is not easy to justify books in which the story is a mere artificial vehicle for teaching facts. Uncle Robert's Geography is an example of the improper use of the story form. Such a presentation is somewhat insincere. And experiments

uniformly seem to show that this device is detrimental, not only to the comprehension of what is read, but also to the formation of right attitudes toward work. Often the story form covers up a conscious or unconscious deficiency in scholarship on the part of the author. Certainly the form and requirements of story telling are not conducive to giving full and critical attention to accuracy in the presentation of facts. It is no wonder that, in reading such books, children do not easily distinguish fact from fiction. Moreover, they seem to expect a certain amount of padding and read accordingly. It is true that there are a few very useful books which use this method of presenting facts. A good example is Jameson's The Flame Fiend. For the most part, such books are good in spite of the story presentation, not because of it. Burgess' Animal Stories is an example of books which are valuable in interesting children in nature, in spite of the unfortunate way in which human conversation and motives are attributed to the animal characters.

- 2. Unnecessary elaboration, in order to gain what is supposed to be 'style,' is almost certain to detract from the comprehension of what is read.
- 3. The vocabulary of a selection plays a very important part in determining how accurately that selection is comprehended. Only a small proportion of the words in a selection can be unknown without interfering seriously with the comprehension of that selection. By an unknown word is meant not one which the child has not seen in print, but rather one whose meaning he does not know even when the word is spoken to him. When a child comes upon a word he knows when spoken, but which he has not seen in print, he will no doubt hesitate; but after the second period of reading instruction, as described in Chapter III, he should be able to identify the word from its context and from his ability in phonetic analysis.

In the case of words which are in the child's spoken vocabulary but which have not been read by him before, we do not have data which show either the number of such words which should be introduced per page or the amount or distribution of repetition which the word should have. Textbook appraisals have often proceeded on

<sup>&</sup>lt;sup>8</sup> Hilliard, G. H. Probable Types of Difficulties Underlying Low Scores on Comprehension Tests. University of Iowa Studies in Education, Vol. II, No. 6, 1924.

the theory that the fewer such words per page and the greater the number of repetitions on succeeding pages, the higher should be the rating which a book receives. This is wholly unwarranted. To construct a textbook after such a fashion inevitably leads to bareness and formality. Until experimental conclusions indicate otherwise, it is much safer to present interesting and vital experiences or information in a simple way, keeping well within the vocabulary which a child uses and leaving the matter of the repetition of words to the requirements of good writing.

The case of words which have neither been seen nor heard before presents a very different problem. Studies by Pressey 4 and others show that the proportion of technical words is sometimes quite large and that this factor constitutes a significant difficulty in reading.

Although the difficulty of the vocabulary of a selection can be determined only by direct experiment in which children read the selection, an approximate difficulty can be obtained by comparing its vocabulary with that of the children of the grade for which the book is intended. Unfortunately, we do not have adequate counts of children's vocabularies, except for pupils in the kindergarten and first grade. The data from these counts are invaluable to those who are preparing material to be read by children in the primary grades, as well as for appraising the vocabulary of such books as are meant to be read in those grades.

The amount of technical vocabulary which a book contains can be obtained, in a rough way, by comparing the vocabulary of the book with that of the Thorndike word list. However, in making such a comparison, it must be kept in mind that the Thorndike list is heavily weighted with classical literary words. Many words commonly understood by children are not found in this list. Among such words are gasoline and movie.

- 4. The paragraphing of the ordinary textbook for children is exceedingly poor. It rarely conforms to the idea that a single unit of convenient size should be presented in well organized form in one paragraph.
- 5. Textbooks should contain not only well written, valuable information, but also concrete help and sound advice to guide pupils

<sup>4</sup> Pressey, Luella C. School and Society, 29 (July 19, 1924), pp. 91-96.

in study. This help will be most effective when it is tied up with specific lessons. While such aid will undoubtedly increase the efficiency with which each lesson is mastered, it should be prepared by the author with an end in view which is even more important. Out of this immediate application, day by day, should come an increased interest in high standards of accomplishment and better methods of work in the study of other books of the same general type.

6. As a general practice, both teachers and pupils should be led to choose work-type books which are written by those who are authorities in the field which the book covers. Among such books are Chapman's The Travels of Birds and Carter's Horses of the World.

There should be not only books which will aid in the study of the various subjects in the school, but also those which contain material not usually found in any subject in the course of study. Such books are those on thrift, manners, fire prevention, and forestry.

7. Other requirements for books of the work type. The mechanical requirements set up for appraising books of the recreatory type will, in the main, hold for books of the work type. It is especially necessary that they contain proper indexes, tables of contents. It is doubtful whether most informational books written for use in the first six grades are sufficiently illustrated, when measured either by the number or by the quality of the illustrations. Books are constantly improving, however, in the degree to which they meet this requirement. Especially to be recommended is the skilful use which some of our modern books make of charts and diagrams.

# III. TYPES OF PEDAGOGICAL EQUIPMENT NEEDED IN ASSISTING THE CHILD TO ACQUIRE THE VARIOUS FUNDAMENTAL PROCESSES OF ORAL AND SILENT READING

Under this heading would be classified phonetic charts and cards, rapid exposure exercises, especially devised seat exercises, special oral reading exercises such as those described in Chapter IX, and the method primer.

Silent reading textbooks may be classified both under pedagogical materials and under work-type materials. They contain exercises for the development of silent reading abilities. They also should contain valuable and interesting information, and should constitute the pupil's textbook on how to study. Primers and many so-called method readers may be classed both as recreatory materials and also as pedagogical materials.

Important and necessary as are these various pedagogical aids, they must be kept in proper relation to the books which are to be read for recreation and to those with which the pupils work in connection with the study of other school subjects. Their purpose is to develop abilities to the point where they can be carried over into such reading as is done orally and silently for recreation, or, on the other hand, into the study of all lessons in which the work type of reading is involved.

In addition to this equipment for use by and with the pupils, the teacher needs better information concerning the interest and capacity of children in this period of development. There has been too much naive assumption as to the nature of children's conscious interests and abilities in response to the great variety of situations which confront them in life outside the school. Studies of such interests and abilities are now under way, but with a single exception the results are not available for publication in this Yearbook. That exception is found in the case of the spoken vocabulary of pre-school, kindergarten, and first-grade children. The words most frequently found in the spoken vocabulary of these children are given on pages 186-193.

In this discussion, no attempt has been made to give each point space according to its importance. Rather, the committee has felt free to pass briefly over statements which seem obvious or which are commonly accepted, in order to allow space for a more detailed discussion of points which seemed to need greater emphasis.

### PART II

# RECOMMENDATIONS BY PERIODS

Part Two contains, first, a general discussion of the policy of the committee in making specific recommendations; second, a bibliography of references on the selection of books for children; third, a discussion of the material requirements for each of the periods outlined in Chapter III, together with specific recommendations of both the recreatory and work type of materials.

#### GENERAL POLICY IN MAKING RECOMMENDATIONS

It is the general policy of the committee not to recommend either basic texts or special commercial pedagogical materials. This holds both for the recreatory and for the work type of material. These recommendations are withheld in the belief that if all commonly used textbooks and other pedagogical materials were recommended, the list would be meaningless. On the other hand, to select from among these materials would require an amount of scientific data which the committee does not possess. The committee has, however, set up certain standards which such books and materials should meet.

Specific recommendations are made for books which would ordinarily be classed as supplementary. This includes books of both the recreatory and work types. The list has purposely been kept small. Those who desire more extensive recommendations are referred to the lists contained in the bibliography which follows.

# BIBLIOGRAPHY OF BOOKS AND ARTICLES ON SELECTING READING MATERIALS FOR CHILDREN

I. REFERENCES DEALING WITH THE GENERAL PROBLEM OF SELECTION OF BOOKS FOR CHILDREN

The most valuable references are starred (\*).

- Baker, Franklin T. "An Educational Bogey." Illinois Bulletin, May 1, 1912.
- Bamsberger, Velda C. "Standard Requirements for Memorizing Literary Material." University Bulletin 3, University of Illinois, Bureau of Educ. Research.
- Barnes, Walter. The Children's Poets. New York: World Book Co., 1924. Bobbitt, John F. The Curriculum: "Reading as a Leisure Occupation," Ch. 17. Boston: Houghton Mifflin Co., 1918.
- Carpenter, G. R., Baker, F. T., Scott, F. N. Teaching of English in the Elementary and Secondary School. New York: Longmans Green and Co.
- Chubb, Percival. The Teaching of English in the Elementary and Secondary School. New York: Macmillan, 1903.
- Crothers, S. M. The Gentle Reader. Boston: Houghton Mifflin, 1903.
- Crow, C. S. Evaluation of English Literature in High School. Teachers College, Columbia University Contributions to Education.
- \*Curry and Clippinger. Children's Literature. Chicago: Rand McNally.
- Dunn, F. W. "Interest Factors in Primary Reading Material." Doctor's thesis in education, Teachers College, Columbia University, 1920.
- \*Eastman, Max. The Enjoyment of Poetry. New York: Scribners, 1918.

- Field, W. T. Fingerposts to Children's Reading. Chicago: McClurg, 1907.
  Garnett, W. F. "Children's Choices in Prose, Grade IV." Summary in Journal of Education, June 5, 1924. Boston.
- Henderson. Report of State Dept. of Public Instruction, Albany, N. Y.: 1897.
- Hosic, J. F. The Elementary Course in English. Chicago: University of Chicago Press, 1911.
- \*Hosic, J. F. Empirical Studies in School Reading with Special Reference to the Evaluation of Literary Reading Books. New York: Columbia University, Teachers College, Contributions to Education, 1921.
- Hunt, C. W. What Shall We Read to the Children. Boston: Houghton Mifflin Co., 1915.
- Jordan, A. M. Children's Interests in Reading. New York: Teachers College, Columbia University, 1921.
- Kirkpatrick, E. A. "The Problem of Children's Reading." Northwestern Monthly, Vols. 8 and 9.
- Knight, F. B. and Franzen, R. H. Textbook Selection. Baltimore: Warwick and York, 1922, Chapter II.
- Kready, Laura. A Study of Fairy Tales. Boston: Houghton Mifflin, 1916.
  Lamborn, E. A. Greening. The Rudiments of Criticism. Oxford, England: Clarendon Press, 1916.
- \*Leonard, S. A. Essential Principles of Teaching Reading and Literature. Philadelphia; J. B. Lippincott, 1922.
- Lowe, Orton. Literature for Children. New York: Macmillan.
- Mackintosh, H. K. "Study of Children's Choices in Poetry, Grade V."
  Unpublished master's thesis, College of Education, State University of
  Iowa, 1924. Summaried in *The Elementary English Review*, June,
  1924, Vol. I, No. 5, Detroit, Michigan.
- Moore, A. C. New Roads to Childhood, New York: G. H. Doran Co., 1923. Moore, A. C. Roads to Childhood, New York: G. H. Doran Co., 1920.
- Moore, A. C. "Children's Reading and Fall Books." Bookman, November
- 1920.

  Olcott, F. J. The Children's Reading. Boston: Houghton Mifflin Co., 1922.
- Pickett, L. H., and Boren, D. Early Childhood Education. Yonkers, N. Y.: World Book Co., 1923.
- Quiller-Couch, A. On the Art of Reading. New York: Putnam, 1920.
- Salisbury, E. I. An Activity Curriculum for Kindergarten and Primary Grades. San Francisco: Harr Wagner Pub. Co., 1924.
- Selected List of Poetry and Stories for Children in Kindergarten, First and Second Grades. 40 High St., Springfield, Mass.: International Kindergarten Union, 1918-1920.
- Shedlock, M. Art of the Story Teller. London: J. Murray, 1915.
- Smith, F. O., "Pupils' Voluntary Reading." Ped. Sem., Vol. 14.
- Stone, C. R. Silent and Oral Reading. Boston: Houghton Mifflin, 1922.
- Stratton, Clarence. The Teaching of English in the High School. New York: Harcourt, Brace, Howe.

- Thomas, C. S. Teaching of English in Secondary Schools. Boston: Houghton Mifflin Co., 1917.
- Tomkinson, W. Teaching of English: A New Approach. Oxford, England: Clarendon Press, 1921.
- \*Uhl, W. L. The Materials of Reading. Chicago: Silver, Burdett & Co., 1924.
- Vostrovsky, Clara. "Children's Taste in Reading." Ped. Sem., Vol. 6, pp. 523-538.
- Wilkinson, Marguerite O. New Voices. New York: Macmillan, 1919.
- Williams, Grace C. The Little Bookshelf. Chicago: Rand McNally, 1924.
- Yoakum, G. A. "Course of Study in English Literature for the Elementary School." Master's thesis, College of Education, State University of Iowa, 1919.

# II. AVAILABLE LISTS OF BOOKS FOR CHILDREN

- A Shelf of Books for a One-Room School. Chicago: American Library Association, 1922.
- \*American Library Association Book List. Chicago: Issued monthly by the American Library Association. (A selected list is issued annually.)
- \*Baker, F. T. "Bibliography of Children's Reading." Teachers College Record, Vol. 9. (1908), Nos. 1 and 2.
- Bailey, C. S. For the Story Teller. Springfield, Mass.: Milton Bradley Co., 1913.
- Bamsberger, Velda C. Standard Requirements for Memorizing Literary Material. University Bulletin No. 3, University of Illinois, Bureau of Educational Research.
- "Books to Grow On." Graded list of 25 books each month in Journ. of Natl. Educ. Assn. (beginning in February, 1924).
- De La Mare, Walter, "Books for Children." Literary Review, New York Evening Post. (Nov. 10, 1923.)
- De Mille, A. B. Books for Boys. Natl. Education Assn., 1922.
- Fenton, J. C., Ruch, G. M., and Terman, L. M. Suggestions for Children's Reading with Special Reference to the Interests of Gifted Children.
  Palo Alto: Stanford Univ. Press, 1921.
- Forbush, W. B. A Manual of Stories. Philadelphia: American Institute of Child Life.
- \*Eaton, Anne T. Books for Vacation Reading. New York: Lincoln School, Columbia University.
- Gift Books for Children's Book Shelves. Chicago: American Library Assn., 1922.
- \*Graded List of Books for Children. Prepared by Elem. School Library Committee of the N. E. A. Chicago: American Library Association, 1922.
- Graded List. 1201 Tenth St., N. W., Washington D. C. National Congress of Mothers.

- \*Hassler and Scott. Graded List of Stories to Tell and Read Aloud. Chicago: American Library Assn., 1923.
- Herzberg, Max J. The World of Books. Boston: The Palmer Company, 1922.
- Horton, Marion. Viewpoints in Essays. Chicago: American Library Association. 1920.
- Hosic, J. F. Elementary Course in English. Chicago: University of Chicago Press, 1908.
- Leonard, S. A. Reading for Realization of Varied Experience. Chicago: J. B. Lippincott, 1922.
- Mahoney, J. J. Standards in English. Yonkers on Hudson, New York: World Book Co., 1919.
- Moses, M. J. "Royal Books for Children." Outlook, November, 1923.
- One Thousand Good Books for Children. Washington, D. C.: U. S. Bureau of Education.
- Partridge, E. N., and Partridge, G. E. Story Telling in School and Home. New York: Sturgis Co., 1913.
- Pickett, L. H., and Boren, D. Early Childhood Education. Yonkers on Hudson, New York: World Book Co., 1923.
- Powers, L. St. John, "Beautifully Illustrated Editions of Children's Books." Children's Royal, Oct. and Nov., 1923.
- Rathbone, J. A. Viewpoints in Travel. (Graded list.) Chicago: American Library Association, 1919.
- Reading List for First and Second Grades. Des Moines: Iowa Library Commission.
- Salisbury, E. I. An Activity Curriculum for Kindergarten and Primary Grades. San Francisco: Harr Wagner Pub. Co., 1924.
- Shedlock, M. The Art of the Story Teller. London: J. Murray, 1915.
- Selected List of Poetry and Stories for Children in Kindergarten, First and Second Grades. International Kindergarten Union, 1918-1920.
- Stevens, D. H. The Home Guide to Good Reading. Chicago: F. J. Drake & Co., 1920.
- Stone, C. R. Silent and Oral Reading. Boston: Houghton Mifflin Co., 1922, pp. 93-97.
- Tappert, K. Viewpoints in Biography. Chicago: American Library Assn., 1920.
- Uhl, W. L. Scientific Determination of the Content of the Elementary School Course in Reading. University of Wisconsin, 1921.
- Vostrovsky, Clara. "Children's Taste in Reading." Ped. Sem., Vol. 6, pp. 523-538.
  - III. REFERENCES DEALING WITH THE LOCATION OF SPECIFIC POEMS AND STORIES FOR CHILDREN
- Eastman, Mary H. Index to Fairy Tales. Boston: Boston Book Co., 1915. Firkins, Ina T. Index to Short Stories. White Plains, New York: W. H. Wilson Co., 1915.

Granger, Edith (Ed.) Index to Poetry and Recitations. A. C. McClurg Co., 1918.

### SPECIFIC RECOMMENDATIONS BY PERIODS

The following recommendations are grouped according to the periods outlined in Chapter III of this Yearbook. These periods are briefly:

- First period. "The period of instruction and experience which is prerequisite to reading." (Kindergarten and frequently the early part of the first grade.)
- Second period. "Instruction to introduce pupils to reading as a thought-getting process and to develop considerable independence in word recognition." (Following Period 1 in Grade I and sometimes extending into Grade II.)
- Third period. "Vigorous emphasis on the fundamental attitudes, habits and associations." (Grades II and III.)
- Fourth period. "Period of wide reading." (IV, V, and VI.)
- Fifth period. "The period of refining reading and study habits."
  (Junior and senior high schools.)

### THE FIRST PERIOD

(The kindergarten and frequently the early part of the first grade)

Much of the equipment needed during this period is scarcely reading matter at all. It consists of those materials which are inherent in a concrete and enriched course of study and which are necessary to the solution of vital problems which arise from thought-provoking situations. Among such problems are those arising in churning butter, in caring for a pet, or in drying fruit. Nature study, games, story telling, drawing, bulletin boards, stereographs, and excursions also stimulate thinking and help to develop the language abilities which are basic to a successful introduction to the reading processes.

In addition to these materials for use by the pupils, the teacher needs to have a list of the words which ought to be in the child's spoken vocabulary and accurately understood before the child actually begins to read. This does not mean that formal word or vocabulary drill should be given; such a list is to be used merely as a guide to the teacher in the study of the development of vocabulary. These words are given on pages 186-192.

### I. MATERIALS NEEDED FOR RECREATORY READING

The books for the first period were selected from a list rated by twenty-four kindergartners and children's librarians. Not a single book received uniformity of rating. In fact, in all but a very few cases, a book was rated excellent by one person and poor by another. These differences of opinion point to the need of experimentation as the only sure basis for choosing children's books. However, until such experiments are completed, a summary of judgments seems to afford the best basis for making a recommendation.

- A. Books Containing Literature to be Read or Told to the Children by the Teacher. Books which are marked with a star are illustrated and can be placed in the hands of children as picture books.
  - 1. Rhymes and Poems
    - a. Mother Goose editions. (The usual manner of writing the bibliography is changed here to this order: Illustrator. Name of Book, Editor, City: Publisher, Date.)
    - •(1) Brooke, L. Leslie. Oranges and Lemons, and Other Nursery Songs. New York: Frederick Warne & Co., 1917. Also in the same edition are The Man in the Moon and other Nursery Songs (1917), Little Bo-Peep and Other Nursery Rhymes (1922), This Little Pig Went to Market and Other Nursery Rhymes (1922). (These books have full-page, colored illustrations, stiff paper covers, and sell at \$.75 each. Combinations of these small editions sell at \$2.00. A one-volume edition sells at \$3.00.)
    - \*(2) Caldecott, Ralph. The House that Jack Built. New York: Frederick Warne & Co., 1907. Also in the same edition are Sing a Song of Sixpence (1902), Queen of Hearts (1902), Hey Diddle Diddle and Baby Bunting (1902), Ride a Cock Horse and A Farmer Went Trotting (1902). (These editions in limp covers sell at \$.60 each. Bound in four volumes with other material, they sell at \$2.25 each. Bound in two volumes, they sell at \$4.00 each.)
    - \*(3) Crane, Walter. Old Mother Hubbard Picture Book. New York: Dodd, Mead & Co., 1914. (Also contains The Three Bears.)
    - \*(4) Falls, A. B. Mother Goose. New York and Garden City: Doubleday, Page & Co., 1924.
    - \*(5) Folkard, Charles. Mother Goose's Nursery Rhymes. Edited by L. Edna Walter. London, W. I., Soho Square: A. & C. Black, Ltd., 1924. (Many illustrations, both large and small.)

- \*(6) Greenaway, Kate, Mother Goose. New York: Frederick Warne & Co. (A small edition, 4½x6½.)
- \*(7) Richardson, Frederick. Mother Goose. Edited by Eulalie Osgood Grover. Chicago and New York: P. F. Volland Co. 1915. (There are two editions, one \$1.35 and the other \$3.00.)
- \*(8) Robinson, Charles. The Big Book of Nursery Rhymes. Edited by Walter Jerrold, New York: E. P. Dutton & Co., 1903. (A very complete and carefully edited Mother Goose. Book is large for kindergarten children to handle easily.)
- (9) Smith, Jessie Wilcox. Mother Goose. New York: Dodd, Mead & Co., 1918. (Carefully edited. There is a large and a small edition.)
- \*(10) Wright, Blanche Fisher. The Real Mother Goose. Chicago and New York: Rand McNally Co., 1919. (Selections of "The Real Mother Goose" are bound into smaller volumes. These volumes may be purchased rebound from the H. R. Huntting Co.)
- \*(11) Wilson, Edith R. Everychild's Mother Goose. Edited by Carolyn Wells. Music by Sidney Homer. New York: The Macmillan Co., 1919. (This book is included here because of the excellent selection of rhymes by Carolyn Wells.)

### b. Other rhymes and poems.

- \*(1) Adelborg, Ottilia. Clean Peter and the Children of Grubbylea. New York: Longmans, Green & Co., 1901.
- (2) Burgess, Gelett. The Goop Directory. New York: Frederick A. Stokes Co., 1913.
- (3) Chinese Mother Goose Rhymes. Translated and illustrated by Isaac Headlund. New York: Fleming R. Revell Co., 1900.
- \*(4) De La Mare, Walter. A. Child's Day. New York: Henry Holt & Co., 1923.
- \*(5) Lear, Edward. Nonsense Books. Boston: Little, Brown & Co., 1918.
  - (6) Fyleman, Rose. Fairies and Chimneys. New York: George H. Doran Co., 1920.
- (7) Greenaway, Kate. Marigold Garden and Under the Window.
   New York: Frederick Warne & Co., 1910. (Reprints.)
- \*(8) Lofting, Hugh. Porridge Poetry. New York: Frederick A. Stokes & Co., 1924.
- \*(9) Jackson, Leroy. The Peter Patter Book. Illustrated by Blanche Fisher Wright. Chicago and New York: Rand McNally & Co., 1918.

- \*(10) Johnny Crow's Garden. Illustrated by L. Leslie Brooke. New York: Frederick Warne & Co., 1904.
- \*(11) Miller, Olive Beaupre. In the Nursery of My Bookhouse.
  Vol. 1. Chicago: The Book House for Children, 1920.
  (Nicely-illustrated and well-edited, but one of an expensive set of books.)
- \*(12) Moore, Clement. The Night Before Christmas. New York: Samuel Gabriel Sons & Co.
  - (13) Rossetti, Christina. Sing Song. New York: The Macmillan Co.
- \*(14) Stevenson, Robert Louis. A Child's Garden of Verses.

  Illustrated by Florence Edith Storer. New York: Charles
  Scribner's Sons, 1920. (Charles Scribner's Sons have some
  twenty-five poems not published elsewhere.)
- (15) Wiggin, Kate Douglas, and Smith, Nora Archibald. The Posy Ring. New York: Doubleday, Page & Co., 1903.
- Poems and rhymes set to music. (To be used in both the first and second periods.)
  - \*(1) Old Dutch Nursery Rhymes. English version by R. H. Elkin. Original tunes harmonized by J. Rontgen. Illustrated by H. Willebeck Le Mair. Philadelphia: David McKay, 1917.
  - \*(2) Little Songs of Long Ago. Harmonized by Alfred Moffat. Illustrated by H. Willebeek Le Mair. Philadelphia: David McKay, 1911. (Music excellent for little children.)
  - \*(3) Our Old Nursery Rhymes. Harmonized by Alfred Moffat. Illustrated by H. Willebeek Le Mair. Philadelphia: David McKay, 1911. (Music excellent for little children.)
  - \*(4) Some Nursery Rhymes of Belgium, France and Russia. Selected and rhymed into English by L. Edna Walter. Belgian airs harmonized by Lucy Broadwood, London, Soho Square, W.: A. & C. Black, 1917. The rhymes from each country are illustrated by an artist of that country. (French rhymes are illustrated by Boutet de Monvel.)
  - \*(5) Songs from Mother Goose. Music by Sidney Homer. Illustrated by Maginel Wright Enright. New York: The Macmillan Co., 1920.

## 2. Stores to be Read or Told to the Children

- \*a. Bannerman, Helen. The Story of Little Black Sambo. New York: Frederick A. Stokes Co., 1900.
  - b. Bryant, Sara Cone. Best Stories to Tell to Children. New York: Houghton Mifflin Co., 1912.

- \*c. Carrick, Valery. Picture Tales from the Russian. Translated by Nevill Forbes. New York: Frederick A. Stokes Co.
- \*d. Clark, Margery. The Poppy Seed Cakes. Illustrated by Maud and Miska Petersham. Garden City and New York: Doubleday, Page Co., 1924.
- \*e. Cock, the Mouse, and the Little Red Hen, The. Retold by Felicite Lefevre. Illustrated by Tony Sarg. Philadelphia: George W. Jacobs & Co.
- \*f. Gruelle, Johnny. Raggedy Ann. Illustrated by Johnny Gruelle. Chicago and New York: P. F. Volland Co., 1918.
  - g. Keyes, Angela. Stories and Story Telling. New York: D. Appleton & Co., 1911.
- \*h. Lofting, Hugh. The Story of Mrs. Tubbs. Illustrated by Hugh Lofting. New York: Frederick A. Stokes Co., 1923.
- \*i. Miller, Olive Beaupre. In the Nursery of My Bookhouse.

  Volume One. Chicago: The Book House for Children, 1920.

  (Well-illustrated, selected and edited but one of an expensive set.)
- \*j. Mitchell, Lucy Sprague. Here and Now Story Book. Illustrated by Hendrick Willem Van Loon. New York: E. P. Dutton & Co., 1921. (For the three-year olds.)
- \*k. O'Grady and Throop. Teacher's Story Telling Book. Chicago: Rand McNally & Co.
- \*1. Old, Old Tales Retold. Illustrated by Frederick Richardson. Chicago and New York: P. F. Volland Co., 1922.
- \*m. Potter, Beatrix. The Tale of Peter Rabbit. New York: Samuel Gabriel Sons & Co. (Large pictures. Linenette book.) Also New York: Frederick Warne & Co. (Original small volume.)
  - n. Shedlock, Marie. The Art of the Story Teller. New York:
    D. Appleton & Co. (Contains both a source book for teacher and stories for children; also a suggestive list of stories.)
- \*o. Story of the Three Bears, The. Illustrated by L. Leslie Brooke. New York: Frederick Warne & Co. (Paper edition, \$.75.)
- \*p. Story of the Three Little Pigs, The. Illustrated by L. Leslie Brooke. New York: Frederick Warne & Co., 1905. (Paper edition, \$.75. These two tales, "o" and "p," with several others, bound in cloth, \$3.00.)
- B. Picture Books to be Placed in the Hands of the Children. This list can be used in both first and second periods. Books marked with a star in the preceding lists may also be used for this purpose. (Some of these

books contain simple rhymes, poems, or stories which may be read by the brighter children who have made a beginning in reading. It is to be remembered that the following books are in this list primarily because of the pictures not the reading content. One of the most satisfactory sources of pictures in the kindergarten is the home-made scrap book.)

- Byron, May. The Little Small Red Hen. New York: Hodder & Stoughton.
- Carter, William Harding. The Story of the Horse. Illustrated by Herbert Miner. Washington, D. C.: National Geographic Society.
- Deming, Therese. Animal Folk of Wood and Plain. Illustrated by Edwin Deming. New York: Frederick A. Stokes Co., 1916.
- Deming, Therese. Indian Child Life. Illustrated by Edwin Deming. New York: Frederick A. Stokes Co., 1899.
- Deming, Therese. American Animal Life. Illustrated by Edwin Deming. New York: Frederick A. Stokes Co., 1916.
- Fuertes, Louis Agassiz, and others. The Book of Dogs. Washington, D. C.: National Geographic Society, 1919.
- 7. Henshaw, Henry. Book of Birds. Illustrated by Louis Agassiz Fuertes. Washington, D. C.: National Geographic Society.
- 8. Kaberry, Charles. The Book of Baby Dogs. Illustrated by E. J. Detmold. New York: Hodder and Stoughton.
- 9. My Book of Birds. New York: Samuel Gabriel Sons & Co.
- Nature Magazine. Washington, D. C.: American Nature Association.
- Nelson, Edward W., Wild Animals of North America. Illustrated by Louis Agassiz Fuertes. Washington, D. C.: National Geographic Society.
- 12. The Railway Book. New York: Samuel Gabriel Sons & Co., 1913. (Linenette book.)
- 13. Smith, E. Boyd. The Chicken World. Also illustrated by E. Boyd Smith. New York: G. P. Putnam's Sons.
- Smith, E. Boyd. The Circus. Illustrated by E. Boyd Smith. New York: Frederick A. Stokes Co.
- Smith, E. Boyd. The Country Book. New York: Frederick A. Stokes Co., 1924.
- Smith, E. Boyd. The Farm Book. New York: Houghton Mifflin Co., 1910. Also by the same author and publisher, The Railroad Book (1913) and The Seashore Book.
- Story of the Ship, The. Illustrated by Gordon Grant. New York: McLoughlin Bros., Inc., 1919.

# II. ACTIVITIES THAT PREPARE FOR READING BY ENRICHING THE CHILD'S EXPERIENCES

- A. Projects, examples of:
  - 1. Making valentines
  - 2. Making Christmas gifts
  - 3. Making a jack-o'-lantern
  - 4. Making a snowman from snow
  - Collecting frog eggs and watching the tadpoles change into frogs.
  - 6. Canning
- 7. Making apple jelly
- 8. Making biscuits
- 9. Weaving large rugs
- 10. Churning butter
- 11. Making a bird bath
- 12. Building a terrarium
- 18. Filling an aquarium
- 14. Caring for hen and chickens
- 15. Making a garden
- 16. Preparing for a party
- B. Nature study activities
- C. Games
- D. Excursions
- E. Hygiene lessons
- F. Using stereopticon views
- G. Bulletin boards
  - The following books will help the teacher make such experiences vital:
    - Hill, Patty and others. A Conduct Curriculum. New York: Charles Scribner's Sons.
    - Parker, S. C., and Temple, Alice, Unified Kindergarten and First-Grade Teaching. Chicago: University of Chicago Press, 1924.
    - Salisbury, Ethel I. An Activity Curriculum for the Kindergarten and the Primary Grades. San Francisco: Harr Wagner, 1924.

### THE SECOND PERIOD

(Here the object of instruction is "to introduce pupils to reading as a thought-getting process." This period follows period one in the first grade and sometmies extends into the second grade.)

# I. MATERIALS NEEDED IN THE DEVELOPMENT OF INFORMAL LESSONS

# A. Rich Experiences.

All the types of interesting, informal activities recommended in the first period as a preparation for reading are appropriate also for the second period. As pointed out in Chapter III, they constitute the basic approach to reading as a thought-getting process. They should by no means be discontinued even after children have begun to read in books. Throughout the second and even the third period, a considerable part of the reading should be tied up with such vital experiences. The following references give valuable suggestions as to how such activities may be made the basis of reading lessons:

- Bonser, F. G., and Mossman, L. E. Industrial Arts for Elementary Schools. New York: Macmillan, 1923.
- McCracken, T. C., and Lamb, H. E. Occupational Information in the Elementary School. New York: Houghton Mifflin, 1924.
- Parker, S. C. Types of Elementary Teaching and Learning. Chicago: Ginn & Co., 1924., pp. 72-102.
- Twentieth Yearbook, Part II of this Society. Bloomington, Ill.: Public School Pub. Co., 1920, pp. 153-172.
- Watkins, Emma. How to Teach Silent Reading to Beginners. Philadelphia: J. B. Lippincott, 1924.
- B. Materials Necessary for Recording the Lessons Which Are Developed from These Activities.
  - 1. The hectograph used with long-hand or manuscript writing
  - 2. The hectograph used with a large-type typewriter
  - 8. A frame and special sets of large type with which the lesson can be set up by the teacher
  - 4. Blackboard work, bulletins and cards. It is best, to print or use manuscript writing in preparing these charts rather than to use a printing outfit or gummed letters. Manuscript writing is much more rapid, as well as more satisfactory. A little practice will enable the teacher to prepare these charts very rapidly.

<sup>&</sup>lt;sup>5</sup> Wise, Marjorie. On the Technique of Manuscript Writing. New York: Scribners, 1924.

#### II THE PRIMER

It is desirable to delay the introduction of the primer until considerable facility has been developed in reading exercises of the type just described. Even when the primer has been introduced, it should be supplemented regularly by such informal procedures as are suggested in Chapters III and IV. Naturally, the more nearly the exercises in the method book can approach the thoughtful, informal procedure recommended there, the better and more desirable the book will be. One or two full sets of primers should be provided for each class. In addition, there should be a few copies each of a number of primers to use with chillren in groups. The standards which a primer should meet are:

- A. The book should deal with interesting experiences or story materials. There is no place for the barren "I see a man," "Can the man see me?" type of repetition.
- B. It is inexcusable for any method to be so prominent that it completely overshadows the thought of the selection.
- C. There should be a brief, simple, efficient manual.
- D. It is essential that the mechanical construction of the book be satisfactory.
- E. The vocabulary should meet two requirements: (1) It should be within the comprehension of the children who are to use it; and (2) it should contain the words of the greatest value to the child in his present and future reading.

We are fortunate in having fairly adequate data on the child's vocabulary at or below the first-grade level. These data were secured by combining the words from three investigations.

The first investigation, by Ernest Horn, consisted in combining the words reported in the individual study of the spoken vocabulary of eighty children varying in age from one to six years. These words, when arranged according to the age of the pupils, give some very interesting information regarding the growth of language abilities.

The second investigation was carried on under the direction of Mrs. Ernest Horn with the assistance of the kindergarten teachers of Iowa and Minneapolis. In this investigation about 200,000 run-

ning words of the spoken vocabulary of kindergarten children were analyzed.

The third investigation, by P. C. Packer, consisted of the tabulation of about 70,000 running words of the spoken vocabulary of first-grade children in Detroit These vocabulary counts were taken from the records of what the children said in connection with the activities in the more informal school periods.

When the results of these three studies were put together, nearly 5,000 different words were found. However, many of these occurred but once or twice. In order to secure a more limited list which seemed likely to contain those words which the average first-grade child could be expected to know, all words were taken which occurred in three investigations with a total frequency of 15 or more, or in two of the three investigations with a total frequency of 25 or more. This list of words follows:

THE COMMONEST WORDS IN THE SPOKEN VOCABULARY OF CHILDREN
UP TO AND INCLUDING SIX YEARS OF AGE

almost

	almost	any	ask
about	alone	anybody	asleep
across	along	anything	at
act	already	anyway	ate
aeroplane	always	apple	aunt
afraid	am	apples	auto
after	American	apron	automobile
afternoon	an	are	awake
again	and	aren't	away
ah	animal	around	awful
air	another	arm	
all	ant	8.5	
babies	bank	bed	beside
baby	barn	bedroom	best
back	basket	b <b>e</b> e	bet
bad	bat	been	better
bag	bath	before	bicycle
bake	bathing	begin	big
ball	be	behind	bigger
balloon	bean	believe	bill
banana	bear	bell	bird
band	beat	belong	birds
bang	because	belt	birthday

boil hiscuit hone hit hite bonnet book hlack blackbird hooks hoth hlanket bother blind hottle block blocks bottom blood bought bounce blow blue bow box bluebird board bov bost bovs brake body

bread
break
breakfast
breast
brick
bridge
bring
broke
broken
broom
brother
brought
brown

brush

buggy

building

built
bump
bunch
bunny
bush
busy
but
butter
butterfly
button
buy
by

cost

could

couldn't

cabbage cage cake call came camel CAD candle candy can't CAD cape CRT card CATA careful carpet carriage CAFTY carrot CRTS cart cat catch

cent center cents chain chair chairs chalk change chase cheese cherry chicken chickens child children chimney chin chocolate choose chop Christmas church circle circus clap

clean clear climb clock close cloth clothes cloud coal coat cocoa coffee cold collar color comb come comes coming company conductor cook cookie coop corn corner

count country cousin cover cow COWR cracker cradle crawl cravon crazv cream crooked cross CTY cup cupboard curtain cut cute

daddy dance

caught

dandelion dandy

class

day dead dear deep depot
desk
did
didn't
die
died
different
dig
dinner
dirt
dirty

dish
dishes
do
doctor
does
doesn't
dog
doing
doll
dollar

dolls
dolly
done
donkey
don't
door
down
downstairs
dozen
draw
drawer
empty

end

engine

enough

even

ever

envelope

dress
drink
drive
driver
drop
drum
dry
duck
dust

every

eves

everybody

everything

everyone

each
ear
early
Easter
easy
eat
egg
face

fall

far

farm

fast

fat

feed

feel

feet

fell

fence

farmer

father

feather

family

either
electric
elephant
eleven
else
field
fifteen
fight
fill
find
fine
finger
finish

eggs

eight

fight
fill
find
fine
finger
finish
fire
fireman
first
fish
five
fix
fixed
flag
girls

flew floor flour flower flowers flv flying fold follow food foot football for forget forgot fork

found
four
fresh
Friday
friend
frog
from
front
fruit
full
fun
funny
furniture

game
garage
garden
gas
gasoline
gate
gave
get
getting
girl

glad glass glasses go God goes going gold gone
good
good-bye
goose
got
grandma
grapes
grass

gravy

gray

green ground grow guess gum gun

great

might

milk

mind

mine

h.d	haven't	he's	horn
had hair	hay	hide	horse
half	healthy	high	horses
hammer	hear	hill	hose
hand	heard	him	hot
handkerchief	Heaven	his	house
handle	heavy	hit	how
hands	hello	hoe	hundred
	help	hold	hungry
hang happy	hen	hole	hurry
nappy hard	her	home	hurt
has	here	homey	husband
have	here's	hop	nusbanu
UWAA	nere s	nop	
1	171	ınside	isn't
ice	I'm	into	it
ice cream	in	iron	it's
if	Indian	is	I've
		•	
Jack	jail	jump	just
Jack Frost	jelly		
keep	killed	kitt <del>y</del>	knocked
kettle	kind	knee	know
key	ki <b>ss</b>	kn <b>ew</b>	kno <b>wn</b>
kick	kitchen	knife	
kill	kitten	knock	
ladder	learn	lettu <b>ce</b>	look
lady	leave	light	looked
lake	leaves	like	looking
land	left	line	looks
last	leg	lion	lost
late	lemon	listen	lot
laugh	lesson	little	lots
lawn	let	live	love
lay	let's	lock	low
leaf	letter	long	lunch
machine	man	May	men
mad	many	may	merry-go-round
made	marble	me	middle

March

mark

match

matter

mean

meat

meet

medicine

make

makes

making

mamma

mustn't move minute more Mr. mv miss morning myself much most Monday mud mother money music mouse monkev mouth must moon night not needle nail nightgown nothing neither name nine now nest napkin number never no naughty nurse nobody new near noise nut next nearly none nice neck nickle nose need o'clock once or our orange ours one of oranges out off ones other outdoors onions office ouch over only old ought own open on pot neanut pin pack potato pink peas page potatoes pipe pail peep pitcher pound pencil paint place pour penny pair plant powder people pan plate pretty piano papa pick played pull Daper plaving pumpkin picnic parade punch please picture park plow puppy pictures part pocket purple pie party point push piece Dass pole pussy pieces past policeman put Dig paste pony putting pigeon pat poor pigs pattern pile DOD pay pillow porch peach quiet **quite** quick radiah raining ran rabbit

rake

rat

rain

race

		٠	
reach	remember	road	rope
read	rest	robin	roses
ready	ribbon	rock	round
real	ride	rode	row
really	right	roll	run
red	ring	roof	running
reindeer	river	room	
	•		. 4 1.1
said	shoes	socks	stocking
sail	shoot	soft	stockings
salt	shop	sold	stone
same	shot	soldier	stop
sand	should	soldiers	stopped
sandwich	shovel	some	store
Santa Claus	show	somebody	story
Saturday	shut	someone	stove
saucer	sıck	something	straight
save	sidewalk	song	straw
Saw	silk	soon	strawberry
says	silver	sound	street
scared	sing	soup	string
school	sir	sour	strong
scissors	sister	sparrow	stuck
seat	sit	spider	stuff
second	sitting	spill	such
see	81X	spoon	sugar
seed	skate	spring	suit
seeds	skip	sprinkle	summer
seem	sky	square	sun
seen	sled	squirrel	Sunday
sell	sleeping	stairs	Sunday-school
send	sleepy	stand	sunshine
sent	slide	standin <b>g</b>	supper
set	slip	star	suppose
seven	slippers	start	sure
sew	slow	station	sweater
shall	small	stay	sweep
she	smell	steal	sweet
sheep	smoke	steam	swim
shelf	smooth	stem	swing
shell	snow	step	-
shine	80	stick	
shoe	soak	still	

take

takes

tag

tail

table

tablecloth

taking talk talking tea teacher tear teeter teeth telephone tell ten tent than thank Thanksgiving that that's the their them then there

these thev thing things think thirsty this those though thought thousand thread three through throw thumb ticket

till time times tinv tip tire tired to to-day toe together told to-morrow tongue too took tooth ton touch towel

town tov toys track train tree trees truck trunk trving tub Tuesday turkev turn turned twelve twenty two

umbrella uncle under until up upon

tie

tiger

tight

upstairs us use used

## very

wagon wait wake walk walking wall want wanted wants warm WAS wash washed washing wasn't watch water Way

we wear week well we'll went WATE we're wet we've what what's wheel when where which while whip

whistle white who whos whole whose why wide will wind window windows winter wipe wire wish wishes with

wolf
woman
wonder
won't
wood
woodpecker
woods
word
work
worm
would
wouldn't
write
writing
wrong

yard	yes	you	yourself
year	yesterday	your	
vellow	vet	yours	

The degree to which the primer prepares for immediate and near tuture reading needs can be determined by comparing it with the words most commonly found in the analysis of first, esecond, and third readers. These three investigations were made several years ago. Recently Supt. H. W. Kircher of Sheboygan, Wisconsin, has completed the analysis of the vocabulary of 37 primers and first readers. His investigation has not been published, but he has kindly given permission to print his list, which follows:

8	air	an	arms
about	Alice	and	around
above	all	another	as
acorn	almost	answer	ask
across	alone	any	asleep
afraid	along	anything	at
after	also	apple	ate
again	always	apples	awake
against	am	are	away
ago	among	arm	
baby	beat	better	blows
back	beautiful	big	blue
bad	because	bird	boat
bag	bed	bi <b>rds</b>	boats
bake	bee	birthday	book
baker	bees	bit	books
ball	been	bite	both
bark	before	black	bow
barn	began	blacksmith	bowl
basket	behind	blew	bowls
be	bell	blossom	bow-wow
bear	best	blow	box

<sup>&</sup>lt;sup>6</sup> Packer, J. L. "The Vocabularies of Ten First Readers." The 20th Yearbook of this Society, Part II, Ch. IX. Public School Pub. Co., Bloomington, Ill., 1921.

<sup>&</sup>lt;sup>7</sup> Housh, E. T. "Analysis of the Vocabularies of Ten Second-year Readers." The 17th Yearbook of this Society, Ch. IV. Public School Pub. Co., 1918.

<sup>&</sup>lt;sup>8</sup> Miller, N. S. "A Critical Analysis of Vocabulary of Ten Third Readers." Master's thesis, University of Iowa.

boy	bright	brought	buttercup
boys	bring	brown	butterfly
branch	brings	build	buy
bread	broke	built	buzz
breast	brook	bu <b>rn</b>	b <b>y</b>
brick	broom	b <b>ut</b>	
bridge	brother	butter	
cak <b>e</b>	carry	city	corn
calf	cares	clear	could
call	cat	clock	country
called	catch	close	cover
calls	caught	clothes	cow
came	chair	clouds	cows
can	change	coal	cradle
candy	cheese	coat	cream
cannot	chick	cock	cried
can't	chicken	cold	cries
cap	child	come	cross
car	children	comes	cry
cars	chimney	coming	cut
care	Christmas	cook	cheer
			•
daisy	dew	doing	draw
Dan	diamond	doll	dream
dance	did	dolly	dress
dandelion	di <b>g</b>	done	drink
dark	dinner	donkey	drive
day	dish	do <b>n't</b>	drum
dead	do	door	dry
dear	doctor	dove	duck
deep	does	down	dust
den	dog	d <b>rank</b>	
each	east	eggs	everything
ear	eat	eight	everywhere
early	eaten	evening	eye
ears	eating	ever	eye <b>s</b>
earth	eats	every	
face	farm	fed	field
fairies	farmer	feed	till .
fall	fast	feel	find
falling	faster	feet	fine
family	fat	fell	finger
i mility	fathan	follow	fir

fellow

fir

father

far

fire	flour	foot	friend
first	flower	for	frightened
fish	flowers	forget	from
five	fly	found	frost
flag	flying	four	fruit
flew	follow	fox	full
flies	following	Fred	fun
floor	food	fresh	funny
11001	1004	11 CO.	
game	glad	good-by	green
garden	go	goose	grew
gate	goat	got	grind
gather	God	grain	ground
gave	goes	grandma	grow
get	going	grandmother	growing
gingerbread	gold	grandpa	guess
girl	golden	grass	
girla	gone	gray	
give	good	great	
had	having	her	ho <b>ney</b>
hair	hay	here	hop
half	he	herself	ho <b>rn</b>
hand	head	hide	ho <b>rse</b>
hands	health	high	hot
hang	hear	hill	hour
happy	heard	him	house
hard	hears	himself	horses
harm	heart	his	how
has	help	hold	hungry
hat	helped	hole	hurrah
have	hen	home	hurt
_			iŧ
Ĭ	ill	into	its
ice	ını	iron	11.5
if	in	is	
Jack	John	jump	just
Jill	• • • • • • • • • • • • • • • • • • • •	,	•
•			
keep	kind	kitten	know
kept	king	kitty	
kill	kite	knew	
_			_
land	large	late	lay
lamb	last	laugh	lead

looks

lost

loud

love

loved

loves

much

Mr.

Mrs.

music

must mv

myself

nose

nothing

not

now

nut

nuts

lesf letter live light lived learn like lives leave leaves likes load legs lilies long left lilv longer lion look less lesson listen looked little looking let.

made miller me mill make meadow makes meadows mind making meat mine mamma meet money man men moon many merry more March met morning Marv mother mew market mothers might mile matter mouse may milk mouth

name neighbor night named neither nine names nest no near never noise neck none new Ned next nor need nice north

O old out opened oak oven on OF of once orange over off other one own often only others ox oh open our

pail pictures peep pan pen Die papa penny piece Daper people pieces party pet pig pat pick pink Daw picked place pay picture plant

tures play
played
playing
plays
playmate
pleasant
please
pleased

plum	pot	pull	puts
pony	present	pussy	
poor	pretty	put	
quack	queer		
rabbit	ready	river	room
race	red	road	rooster
rain	rest	robin	roots
ran	ride	rock	round
rat	right	rocks	run
reach	ring	rode	runs
read	ripe	roll	
	4		
sad said	set	six	squirrels stand
said sail	seven	skip	star
	shake	sky	stars
sailing salt	shall	sleep	stars
	sharp	sleeping	
same sand	she	sleepy	stay step
	sheep shell	sly sm <b>a</b> ll	step
sang Santa Claus	shine	small	sticks
santa Claus	shining	smen smile	still
Saturday	shining ship	smue	sting
Saturday SaW	shoe	800 80	stocking
	shoes	soft	stocking
say	shook	soldier	stop
saying	short	soldiers	store
says school	should	some	stories
scratch	show	something	story
sea.	shut	sometimes	street
second	sick	son	strong
see	side	song	sugar
seed	sight	son	summer
seeds	silver	sorry	sun
seek	sing	sound	supper
seem	singing	south	sweep
seen	sings	speak	sweet
5008	sister	spin	swing
sell	sit	spoon	swim
send	sitting	spring	P.M. 1777
sent	sits	squirrel	
actif.	DI <b>VO</b>	edan rer	
table	take	taking	talking
tail	takes	talk	tall

teach teacher teeth tell ten than thank that the their them then there these up

they thin thing things think thinks this those though thought three throw through thumb

thus till time times tinv to to-day together told Tom too took tools top

touch town train tramp tree tried trot true try turn turkev to-morrow two

uncle under

upon violet us use

visit

used

voice

woke

very

wagon

waited

waiting

wake

walk

wall

want

waked

walking

wanted wants

warm

watch

water

WAS wash

wait

wave wav we wee well went were west wet

what wheat when where which while white

whole whose whom whv wide will wind window wing wings winter wise wish

woman women wolf wonder won't wood woods wool word words work world would write

yard year years yellow yes yet

who

you young your

wished

wishes

without

with

vourself

# III. LITERARY READERS TO BE USED FOR CLASS EXERCISES IN BOTH, ORAL AND SILENT RECREATORY READING

One or two complete sets of such books are sufficient. In addition, a few copies each of several books should be provided for use with groups. The standards for this type of reader are set up elsewhere. Additional standards for literary readers in this period are:

(a) the selections should not be too long; and (b) those used for dramatization should have action, or lively conversation, or be suited to pantomine.

## IV. FREE READING

Sometimes a child will prefer to read by himself; at other times he may wish to read with a small group of his classmates.

The policy should be, after one complete set of books has been purchased, to buy one copy each of a large number of different books, so that much individual and group reading may be done. There are at present very few whole story units for children of this age. The best of these should be purchased.

These individual copies should be the most attractive that can be obtained. Since but one of a kind is bought, it is feasible to purchase more expensive books and better editions than would be possible were the books bought in sets.

A great number of progressive schools use a table upon which to display these books to the children, and set aside a period each day for free reading.

### V. SEAT WORK

There has always been a demand on the part of classroom teachers for aid in the solution of the problem of what to do with pupils for seat work. In primary rooms, which are more informally furnished, this problem is better stated in terms of work that the pupil can do without the immediate direction of the teacher. Of course, free reading comes under this classification. Exercises, similar in type to the informal tests listed in Chapter IX, are excellent for this purpose.

### VI. THE BEGINNING OF SILENT READING OF THE WORK TYPE

One or two sets of work-type silent readers are sufficient. The subject matter of such readers should furnish interesting and vital

information. Such reading, even more than the reading of literature, is the natural outgrowth of the informal exercises recommended for introducing the child to reading as thought-getting. These silent reader texts should not be introduced until a child has gained considerable facility in doing the reading which is based upon informational activities. The fact that such readers contain information on problems in which the child is interested makes them especially valuable for stimulating discussion and for developing a rigorous, thoughtful attitude toward the work type of reading. There is great need for more books which present answers to questions which children frequently ask.

#### VII. PHONICS

Materials used in the teaching of phonics depend, of course, upon the method which the committee recommends. This method seems to be, in general, an analytical one, introduced only after the child has gained a fair vocabulary of sight words. If commercial charts are used care must be taken to insure that the phonic training is kept in its proper subordinate place and approached in a truly functional way.

# VIII. EXERCISES TO DEVELOP THOUGHT GROUPING, TO ENCOURAGE READ-ING FOR THE THOUGHT, AND TO PREVENT LIP READING

These exercises must be carefully constructed if they are to serve the purposes for which they are intended. They must be so made that the child can show he understands the meaning in some way other than by oral reading. The most convenient way of providing materials for these exercises is in the form of cards, either printed or written in manuscript writing. Two companies have already issued cards which seem to satisfy these requirements. Any set of such cards, however, must be supplemented by others of the same type based upon the experiences which the child is having day by day. The teacher may model the form of these home-made cards upon the commercial sets which are now available.

Too much care cannot be taken with the vocabulary, the thought, and the form of these cards. It should be remembered that these exercises are not intended for teaching new words. They are to give facility in combining into thoughts the words with which the chil-

dren are already familiar. Unless carefully constructed and intelligently used, such exercises are a waste of time.

#### SPECIFIC RECOMMENDATIONS FOR THE SECOND PERIOD

- I. MATERIALS NEEDED FOR RECREATORY READING
  - A. Books to be Read to Children by the Teacher.
    - 1. Poetry and Rhymes
      - a. Bailey, Carolyn S. Stories and Rhymes for a Child. With illustrations by Christine Wright. Springfield, Mass.: Milton Bradley Co., 1909.
      - b. Browning, Robert. The Pied Piper of Hamelin. Illustrated by Hope Dunlap. Chicago: Rand McNally Co., 1910.
      - c. Burt, Mary E. (Ed.) Poems that Every Child Should Know. New York: Doubleday, Page & Co., 1904, 1909.
      - d. De La Mare, Walter, A Child's Day (1923); Down-Adown-Derry (1922); Peacock Pie, 1916. New York: Henry Holt & Co.
      - e. Harris, Ada Van Stone and Gilbert, Charles Benajah. Poems by Grades, Vol. I. New York: Charles Scribner's Sons, 1907.
      - f. Lucas, Edward V. (Comp.). A Book of Verses for Children. New York: Henry Holt & Co.
      - g. Moore, Clement. The Night Before Christmas. New York: Samuel Gabriel Sons & Co.
      - h. Quiller-Couch, Lillian and Mabel (Ed.). The Treasure Book of Children's Verse. New York: G. H. Doran Co., 1923.
      - Quiller-Couch, Lillian and Mabel (Ed.). The Treasure Book of Children's Verse. Illus. by Etheldreda Gray. New York: Hodder & Stoughton, 1911.
      - j. Roberts, Elizabeth Maddox. Under the Tree. New York: B. W. Huebsch, Inc.
      - k. Rossetti, Christina. Sing Song. New York: Macmillan Co.
      - Sherman, Frank Dempster. Little Folks' Lyrics. New York: Houghton Mifflin Co.
      - m. Wynne, A. For Days and Days. New York: Frederick A. Stokes Co., 1919.
    - 2. Poetry Set to Music.
      (See recommendations for the first period.)
    - 3. Stories.
      - a. Bailey, Carolyn Sherwin and Lewis, Clara M. For the Children's Hour. Illustrated by G. W. Breck, Springfield, Mass.: Milton Bradley Co., 1906.

- b. Brooke, Leslie L. Tom Thumb. New York: Frederick Warne and Co.
- c. Bryant, Sara Cone. How to Tell Stories to Children. New York: Houghton Mifflin Co., 1905. Chicago: A. Flanagan Co., 1913. Revised edition.
- d. Cowles, Julia D. (Comp.). Stories to Tell. Indian Nature Myths. Chicago: A. Flanagan Co., 1906-1918.
- e. Dasent, Sir George Webb. Popular Tales from the Norse. New York: G. P. Putnam's Sons.
- Davis, John W. Four New York Boys. New York: Educational Publishing Co., 1903.
- g. Harrison, Elizabeth. In Storyland. Chicago: The National Kindergarten College, 1898.
- h. Holbrook, Florence. The Book of Nature Myths. New York: Houghton Mifflin Co., 1902.
- Jacobs, Joseph. English Fairy Tales. New York: A. L. Bent & Co.
- j. Lindsay, Maud M. Mother Stories. Illustrated by Sara Noble Ives. Springfield, Mass.: Milton Bradley Co., 1900.
- k. Lofting, Hugh. The Story of Dr. Dolittle, also The Voyages of Dr. Dolittle. New York. Frederick A. Stokes Co.
- Pratt, Mara L. Legends of the Red Children. Chicago: American Book Co., 1897.
- m. Shedlock, Marie. The Art of the Story-Teller. New York. D. Appleton & Co.
- n. Sylvester, Charles H. Journeys Through Bookland. Chicago: Bellows-Reeve Co., 1912. New edition 1922. Chicago: The Thompson Publishing Co., 1909.
- o. Tanner, Dorothy. Legends from the Red Man's Forest. Chicago:
  A. Flanagan Co., 1895.
- p. Thorne-Thomsen, Gudrun. East o' the Sun and West o' the Moon. Chicago: Row Peterson Co.
- q. Wiggin, Kate D., and Smith, Nora A. The Story Hour. New York: Houghton Mifflin Co., 1890-1899.
- r. Williston, Teresa P. Japanese Fairy Tales. Illustrated by Sanchi O. Gawa. Chicago: Rand McNally Co., 1904.
- Zitkala, S. A. Old Indian Legends. New York: Ginn and Co., 1901.
- t. Warren, M. and Davenport, E. Tales Told by the Gander. New York: Geo. H. Doran Co., 1922.
- u. Stevenson, Augusta. Plays for the Home. New York: Houghton Mifflin Co., 1913.

## B. Books for Children to Read.

- 1. Poetry and Rhymes
  - a. A Day of Play. Illustrated by Carmen Brown. New York: P. F. Volland Co., 1923. (A small linen book.)
  - b. Bowman, John. Happy All Day Through. Illustrated by Janet Laura Scott. New York: P. F. Volland Co.
  - c. Happy Days Illustrated by Carmen Brown, New York: P. F. Volland Co., 1923.
  - d. Jackson, Leroy. The Peter Patter Book. Illustrated by Blanche Fisher Wright. Chicago: Rand McNally & Co., 1918.
  - e. McMurray and Cook. Songs of the Treetop and Meadow.

    Bloomington, Illinois Public School Publishing Co.
  - f. Mother Goose, editions of. (See recommendations in first period.)
  - g. Muter, Gladys. Good Little Children from A to Z. Illustrated by Janet Laura Scott. New York: P. F. Volland Co., 1923.
  - h. My Book of Pets Illustrated by Carmen Brown. Chicago: P. F. Volland Co., 1923 (Small linen book.)
  - Rae, John. Children at Play in Many Lands. New York: P. F. Volland Co., 1922. (Linen book.)
  - j. Riverside Literature Series. Verse and Prose for Beginners in Reading. New York: Houghton Mifflin Co.
  - k. Sherman, Frank D. Little Folk Lyrics. New York. Houghton Mifflin Co.
  - Taylor, A and J., Rhymes for Children Chicago: Educational Publishing Co.

#### 2. Stories

- a. Aesop's Fables. Illustrated by Milo Winter. Chicago: Rand McNally Co.
- Bannerman, Helen. Little Black Sambo New York: Frederick A. Stokes Co., 1900.
- c. Beckwith, M. Helen. In Mythland. Vols. I and II. Chicago: Educational Publishing Co., 1902.
- d. Benson, Alpha Banta. The Pied Piper and Other Stories. Chicago. A. Flanagan Co., 1917.
- e. Hop-o-My-Thumb. Illustrated by L. Leslie Brooke. New York: Frederick Warne & Co.
- Hoyt, Rebecca. Robinson Crusoe for Youngest Readers. Chicago: Educational Publishing Co., 1898.
- g. Lansing, M. F. Rhymes and Stories. New York: Ginn & Co., 1907.

- h. Large, Laura A. Old Stories for Young Readers. New York: The Macmillan Co., 1917.
- Old, Old Tales Retold. Illustrated by Frederick Richardson. P. F. Volland Co., New York, 1922.
- j. Potter, Beatrice. Peter Rabbit. New York: Samuel Gabriel Sons & Co. Also published New York: Frederick A. Stokes Co.
- k. Pratt, Mara L. Aesop's Fables, Vol. II. Chicago: Educational Publishing Co., 1894.
- Puss-in-Boots. Illustrated by L. Leslie Brooke. New York: Frederick Warne & Co.

The Three Bears. Same author and publisher.

The Three Little Pigs. Same author and publisher. 1905.

- m. Wilson, Gilbert L. Myths of the Red Children. New York: Ginn and Co., 1907.
- C. Picture Books for the Children's Table. (Books recommended for the first period may also be used here.)

Note: The best school primers and first readers are, on the whole, not only superior to the books in this list, but are also less expensive.

## II. MATERIALS NEEDED FOR THE WORK TYPE OF READING

- A. Types of Books to be Used as References by the Teacher in Making Silent Reading Exercises for Children.
  - Agricultural Report. Washington, D. C.: Department of Agriculture, current year.
  - 2. Book of Knowledge. New York: The Grolier Society.
  - Comstock, A. B. Handbook of Nature Study. Ithaca, N. Y.: Comstock Publishing Co., 1922.
  - Compton, F. E. Compton's Picture Encyclopedia. Chicago: F. E. Compton & Co.
  - Eastman, C. A. Indian Boyhood. New York: McClure, Phillips & Co., 1902.
  - Miller, Olive T. The First Book of Birds. New York: Houghton Mifflin Co.
  - Thompson, Arthur J. Outlines of Science. New York: G. P. Putnam's Sons.
  - Walker, M. C. Our Birds and Their Nestlings. Chicago: American Book Co., 1904.
  - 9. Whitney, Annie. School Health Studies. Washington, D. C.: Bureau of Education, Department of Interior.
  - Such magazines as The Scientific American, the Nature Magazine, The National Geographic, and Bird Lore con-

tain an abundance of interesting information for the teacher's use. The pictures in these magazines can be used with pupils.

- McCracken and Lamb. Occupational Information in the Elementary Schools and Bonser and Mossman, Industrial Arts for Elementary Schools have helpful bibliographies on all phases of industrial life.
- B. Types of Informational Books for Children to Read. There are few satisfactory informational books, if any, that can be read by pupils in this period. Such books should contain sincere answers to children's questions, should be accurately written and well illustrated. The following books are among the best which are available.
  - Adelborg, Ottilia. Clean Peter and the Children of Grubbylea. New York: Longmans, Green and Co., 1901.
  - Bailey, Carolyn. In and Outdoor Plays and Games and All the Year Play Games. Chicago: Albert Whitman Co.
  - Falls, C. B. A B C Book. New York: Doubleday, Page & Co., 1923.
  - 4. Field and Farm. New York Samuel Gabriel Sons & Co., 1920. (Very well bound.)
  - 5. Hall, Jennie. Weavers and Other Workers. Chicago: Educational Publishing Co.
  - 6. Jewett, Martha. Hops, the Cliff Dweller. Chicago: Educational Publishing Co.
  - 7. Miriam, Ida C. Knowledge Primer Games. Chicago: Albert Whitman & Co. (Very well bound.)
  - My Book of Cats and Dogs. New York: Samuel Gabriel Sons & Co.

## THE THIRD PERIOD

(Grades II and III. This is the period of vigorous emphasis on the fundamental attitudes, habits, and associations.)

## I. MATERIALS FOR RECREATORY READING

For class exercises in developing facility in oral reading and for the study of literary selections, one or two sets of literary readers are sufficient. Especially where schools have limited funds it is doubtful whether other full supplementary sets of literary readers should be bought, Rather, it is better to spend the same amount of money in buying five or six copies each of a few additional titles

<sup>9</sup> Op. Cit.

for reading in groups, and a large and varied list of individual books. These books may be used by individual children to read to the rest of the class for entertainment. By giving a book to the reader only, one solves at once much of the problem of securing an audience attitude. Skilful teachers often conduct all oral reading lessons without a set of books, placing a book in the hands of the reader only.

As in the first grade, it is well to have a reading table upon which attractive books may be placed. Even as early as in these grades, some of the more attractive and better illustrated magazines may be introduced for the pictures they contain.

## II. MATERIALS FOR SILENT READING OF THE WORK TYPE

# A. The Textbook in Silent Reading.

One or two sets of silent reading textbooks are sufficient. These texts should provide a definite introduction to the problems involved in getting information and in solving problems through the use of books. The lessons must therefore contain accurate and worthwhile information. There should be lessons from nature study, from history, from hygiene, from arithmetic—in fact, from the principal subjects which are studied in this and in the following period. The text should contain systematic exercises for developing the fundamental reading abilities needed in the study of books.

# B. Supplementary Informational Books.

Perhaps at no time in the more advanced grades will the child ask so many questions of fact as he does in these grades, and yet there are very few first-class presentations of informational material which will answer the questions most frequently asked. Wherever such books can be found, they should be provided for these grades. When books are appropriate for use in other subjects, such as nature study, history, hygiene, or home geography, they should be bought in sets so that the child may be introduced to the use of text material in the study of such problems as are found in these subjects.

# III. MATERIALS FOR SPECIAL PEDAGOGICAL USE

## A. Phonics.

The phonic work in Grades II and III should be largely individual after proper diagnosis has been made.

# B. Rapid Exposure Exercises.

Such exercises are to be used for the development of better eyemovements, for calling attention to the necessity of reading for thought, and for increasing speed and decreasing lip reading.

For general review, such commercial sets as are recommended for Grade I may be used in these grades. In addition, as in Grade I, it should be the teacher's practice to build upon the children's experience all the varieties of rapid exposure exercises which have been found to be valuable. It is not unlikely that these rapid exposure exercises bring larger returns per unit of time used in Grade II and Grade III than in Grade I.

## SPECIFIC RECOMMENDATIONS FOR THE THIRD PERIOD

#### I. MATERIALS NEEDED FOR RECREATORY READING

- A. Books to be Read by the Teacher to the Children.
  - 1. Babbitt, Ellen G. Jataka Tales, New York, Century Co.
  - 2. Baldwin, James. Old Greek Stories. Chicago: American Book Co.
  - 3. Bryce, C. T. Fables from Afar. Chicago: Newson & Co.
  - 4. Burgess, T. W. The Burgess Animal Book for Children. Boston: Little, Brown & Co.
  - 5. Collodi, C. Adventures of Pinocchio. Chicago: Ginn & Co.
  - Colum, Padraic. The King of Ireland's Son. New York: The Macmillan Co
  - 7. Davis, M. H. and Chow-Leung. Chinese Fables and Folk Stories.
    Chicago: American Book Co.
  - Faulkner, Georgene. Old English Nursery Tales. New York: Doubleday, Page & Co.
  - Graves, A. P. The Irish Fairy Book. New York: Frederick A. Stokes Co.
  - Harris, Joel Chandler. Uncle Remus: His Songs and His Sayings. New York: D. Appleton & Co.
  - Holbrook, Florence. Northland Heroes. New York: Houghton Mifflin Co., 1915.
  - Jordan, David S. True Tales of Birds and Beasts. Chicago: D. C. Heath & Co.
  - Kipling, Rudyard. Just So Stories. New York: Doubleday, Page & Co.
  - 14. Mamin-Siberiak. Verotchka's Tales. New York: E. P. Dutton.

- Mulock, Miss. The Little Lame Prince. Chicago: Rand McNally & Co.
- 16. Perrault, Charles. Fairy Tales. New York: E. P. Dutton Co.
- Scudder, H. E. The Book of Legends. New York: Houghton Mifflin Co.
- 18. Sewell, Anna. Black Beauty. New York: Doubleday, Page & Co.
- 19. Zitkala, S. A. Old Indian Legends. Chicago: Ginn & Co.
- B. Books to be Read Silently by the Children.
  - 1. Aanrud, Hans. Lisbeth Longfrock. Chicago: Ginn & Co.
  - Aspinwall, Mrs. Alicia. Short Stories for Short People. New York: E. P. Dutton Co.
  - Brown, A. F. The Lonesomest Doll. New York: Houghton Mifflin Co.
  - 4. Burgess, T. W. Old Mother West Wind; Jimmy Skunk, and Peter Cottontail. Boston: Little, Brown & Co.
  - Chadwick, Mrs. Mara Louise Pratt. America's Story for America's Children. Chicago: D. C. Heath & Co.
  - 6. Cooke, F. J. Nature Myths and Stories for Little Children. Chicago: A. Flanagan Co.
  - 7. Davis, A. C. Stories of the United States for Youngest Readers. Chicago: Educational Publishing Co.
  - 8. Eggleston, Edward. Stories of Great Americans for Little Americans. Chicago: American Book Co.
  - 9. France, Anatole. Bee, the Princess of the Dwarfs. New York: E. P. Dutton Co.
  - 10. Haaren, J. H. Fairy Life. Chicago: Newson & Co.
  - 11. Hunt, C. W. About Harriet. New York: Houghton Mifflin Co.
  - Jacobs, Joseph. English Fairy Tales. New York: G. P. Putnam's Sons.
  - 13. Judd, M. C. Wigwam Stories. Chicago: Ginn & Co.
  - Lansing, M. F. Quaint Old Stories to Read and Act. Chicago: Ginn & Co.
  - Miller, Olive B. My Book House. Chicago: My Book House Publishing Co.
  - Olcott, F. J., The Book of Elves and Fairies. New York: Houghton Mifflin Co.
  - 17. Phillips, E. C. Wee Ann: A Story for Little Girls. New York: Houghton Mifflin Co.
  - Potter, Beatrix. The Tailor of Gloucester. New York: Frederick Warne & Co.

- Richards, Laura E. The Pig Brother and Other Fables and Stories. Boston: Little, Brown & Co.
- Skinner, E. L. and A. M. Nursery Tales from Many Lands. Chicago: Charles Scribner's Sons.
- 21. Williston, Teresa P. Japanese Farry Tales. Chicago: Rand McNally & Co.

# C. Types of Material for Class Training in Oral Reading and Dramatization.

There should be an abundance of easy material for oral reading and dramatization. Much of it can be selected from the regular text in reading. No selection which is to be used later as literature material should be chosen. A few duplicate copies of books which contain stories easily dramatized, or which are particularly well-adapted to oral reading exercises, should be provided.

- Bannerman, Helen. The Story of Little Black Sambo. New York: Frederick A. Stokes & Co.
- Byron, May. The Little Small Red Hen. New York: Hodder and Stoughton.
- Chadwick, Mara L. Pratt. Little Plays for Little Players. Chicago: Educational Publishing Co.
- Goodlander, Mabel R. Fairy Plays for Children. Chicago: Rand McNally & Co.
- Potter, Beatrix. All About Peter Rabbit. New York: Cupples and Leon Co.
- Pratt, Mara L. Aesop's Fables. Chicago: Educational Publishing Co.
- Wiltse, Sara E. Folklore Stories and Proverbs. Chicago: Ginn & Co., 1900.
- D. Books to be Read Orally by Pupils for the Purpose of Entertainment.
  - Aesop's Fables. Retold by Joseph Jacobs. Chicago: The Macmillan Co.
  - Baldwin, James E. Fifty Famous Stories Retold. Chicago: American Book Co.
  - Bosschere, Jean de. Folk Tales of Flanders. New York: Dodd Mead & Co., 1918.
  - Dickens, Charles. The Magic Fishbone. New York: Frederick Warne & Co.
  - Holbrook, Florence. The Book of Nature Myths. New York: Houghton Mifflin Co., 1902.
  - 6. Mulock, Miss. Adventures of a Brownis. New York: Harper.

- Snedden, G. S. Docas, the Indian Boy of Santa Clara. Chicago: D. C. Heath Co.
- Thorne-Thomsen, Gudrun. East o' the Sun and West o' the Moon. Chicago: Row, Peterson & Co.
- 9. Wilson, G. L. Myths of the Red Children. Chicago: Ginn & Co.

## E. Books of Poetry for Second and Third Grades

- Baker, E. K. The Children's First Book of Poetry. Chicago: American Book Co.
- Field, Eugene. With Trumpet and Drum. New York: Charles Scribner's Sons.
- Fyleman, Rose. Fairies and Chimneys. New York: G. H. Doran Co.
- Lang, Andrew. Nursery Rhyme Book. New York: Frederick Warne & Co.
- 5. Lear, Edward. Nonsense Books. Boston: Little, Brown & Co.
- Quiller-Couch, Mabel and Lillian. Treasure-Book of Children's Verse. New York. G. H. Doran Co.
- Riley, J. W. The Book of Joyous Children. New York: Charles Scribner's Sons.
- 8. Stevenson, Burton E. Home Book of Verse. New York Henry Holt & Co.
- Stevenson, R. L. A Child's Garden of Verses. New York: Charles Scribner's Sons, 1902.
- 10. Wells, C. Book of Humorous Verse. New York: G. H. Doran Co.

## II. MATERIALS NEEDED FOR WORK-TYPE READING

# A. Books for Pupils' Use.

- 1. Andrews, Jane. Seven Little Sisters. Chicago: Ginn & Co.
- 2. Baldwin, James. Robinson Crusos. Chicago: American Book Co.
- 3. Bass, M. F. Stories of Pioneer Life. Boston: D. C. Heath & Co.
- Carpenter, Frank. Around the World with the Children. Chicago: American Book Co.
- Chance, Lulu M. Little Folks of Many Lands. Chicago: Ginn & Co.
- Craig, J. B. Nature Study for Boys and Girls. Kansas City, Mo.: McIndoo Publishing Co.
- Hall, Jennie. Weavers and Other Workers. Chicago: Rand McNally & Co.
- Knowlton, P. A. First Lessons in Geography. New York: The Macmillan Co.

- Miller, Olive T. First Book of Birds. New York: Houghton Mifflin Co.
- Morcomb, M. E. Red Feather Stories. Chicago: Lyons & Carnahan.
- Muller, Mary. Little People of the Snow. Chicago: A. Flanagan Co.
- Nida, Stella. Letters of Polly the Pioneer. New York: The Macmillan Co.
- 13. Shepherd, E. P. Geography for Beginners. Chicago: Rand McNally & Co.
- Shillig, Elnorae. The Four Wonders Chicago: Rand McNally & Co.
- Stone, Gertrude L., and Fickett, Grace. Every Day Life in the Colonies. Boston: D. C. Heath & Co.
- Perdue, H. A. Child Life in Other Lands. Chicago: Rand McNally & Co.
- 17. Strong, Frances L. All the Year Round Chicago: Ginn & Co.
- B. Other material which can be used.

Hectographed sheets on the following types of material: Interesting content material worked out by the teacher on nature study, elementary science, health, safety, history, rules, etc.

Experiences and observations given by the children on excursions, weather, projects, health, rules, etc.

# III. PEDAGOGICAL MATERIALS IN READING

(See recommendations for preceding period.)

#### THE FOURTH PERIOD

(Grades IV, V, and VI. This is the period of wide reading.)

#### 1. RECREATORY READING

As in the preceding grades, one or two full sets of literary readers are ample for class practice in the development of oral reading abilities and for the class study of the literary selections. When these sets have been provided, the policy should be to buy five or six copies each of a number of titles for reading in groups, and one or two copies each of a large number of very attractive books for free reading.

The list of books for these grades should contain those which are classics in the reading experience of children in this period, such as Robinson Crusoe and White Indian Boy. In addition, many other types of interesting books should be included, such as books of

travel, books of adventure, and simply and vividly written histories. The book list should be widely varied in type of selection and in degree of difficulty. At the same time, special care should be exercised to see that each grade library contains a large number of books which are relatively easy to read. Students of the problem of developing facility in silent reading seem to be agreed that a large amount of reading of easy materials is quite essential in these grades.

A very large proportion of the oral reading done in these grades should consist of selections prepared by individual students and read to the class. This insures a proper audience attitude both on the part of the reader and on the part of the audience. Many times as much material as is found in the ordinary literary reader should be read orally.

#### II. WORK-TYPE READING

# A. The textbook in silent reading.

This textbook should lead the pupil to see the importance of acquiring the fundamental skills, habits, and attitudes needed in studying the various subjects in the course of study in the intermediate grades. It should therefore contain lessons in which are involved the principal types of reading difficulties which will confront the pupil in the preparation of his lessons in these grades. Every attitude, skill and ability needed in factual or logical reading can be developed through proper systematic exercises in the silent reading textbooks. It is well to repeat here, however, that this book is primarily a textbook on how to study, that much of the motive for the use of the lessons in this book will come from the recognition of shortcomings in studying informational books, and that as fast as skills, attitudes, and abilities are developed in the use of the silent reader, they must be carried over into the reading done in connection with other subjets. Indeed, as soon as an ability has been developed through the use of the silent reading textbook, it should be applied at once to the study of such subjects as history, geography, arithmetic, and hygiene. It seems obvious that the more the content of silent reading textbooks resembles that found in these subjects, the more easily will this transfer or application be made.

B. The study of textbooks and supplementary books.

Textbook study in such subjects as geography, history, hygiene, and arithmetic is begun in most schools by the beginning of Grade 4. These textbooks should supplement the use of silent readers for silent reading practice. Such drill constitutes valuable training in how to study. Grade libraries should also be supplied not only with duplicate sets of supplementary books in geography, history, and hygiene, but also with a considerable number of single copies which may be used for individual reports.

# III. SPECIAL PEDAGOGICAL MATERIALS

By the beginning of Grade IV, no additional pedagogical materials should be necessary except those used in diagnostic and remedial work with individuals. Even in these grades, most pupils will profit from rapid exposure exercises. Such pupils as have not yet developed independent word recognition should have diagnostic and remedial treatment in phonetics.

# SPECIFIC RECOMMENDATIONS FOR THE FOURTH PERIOD

## I. MATERIALS NEEDED FOR RECREATORY READING

(These books are intended for free reading. Most of them are suitable for reading aloud.)

- Alcott, Louisa May. Little Men. Little Women. Boston: Little, Brown & Co.
- 2. Aldrich, T. B. The Story of a Bad Boy. Boston: Houghton Mifflin Co.
- 3. Andersen, H. C. Fairy Tales. New York: E. P. Dutton & Co.
- 4. Arabian Nights Entertainment. New York: G. P. Putnam's Sons.
- 5. Bennett, John. Master Skylark. New York: The Century Co.
- Beston, Henry B. The Starlight Wonder Book. Boston: The Atlantic Monthly Press.
- 7. Brown, A. F. In the Days of Giants. Boston: Houghton Mifflin Co.
- Boutet de Monvel, Louis Maurice. Joan of Arc. New York: The Century Co.
- Browning, Robert. The Pied Piper of Hamelin. Chicago: Rand McNally & Co.
- Bryant, Lorinda M. The Children's Book of Celebrated Buildings. The Children's Book of Celebrated Pictures. The Children's Book of Celebrated Sculpture. New York: The Century Co., 1924, 1922, 1923.

- Burgess, Thornton W. The Burgess Animal Book for Children. The Burgess Bird Book for Children. Boston: Little, Brown & Co.
- Burroughs, John. Squirrels and Other Fur-bearers. Boston: Houghton Mifflin Co.
- Carroll, Lewis. Alice's Adventures in Wonderland. New York:
   The Macmillan Co.
- Collins, F. A. The Wiveless Man. New York: D. Appleton & Co. Also The Boys' Book of Model Aeroplanes. New York: The Century Co.
- Colum, Padraic. The Adventures of Odysseus and the Tals of Troy. The King of Ireland's Son. New York: The Macmillan Co.
- 16. Comstock, J. H. Insect Life. New York. D. Appleton & Co.
- Daly, T. A. Canzoni and Songs of Wedlock. New York: Harcourt, Brace & Co.
- De Foe, Daniel. Adventures of Robinson Crusoe. New York: Charles Scribner's Sons.
- Dodge, Mary M. Hans Brinker or the Silver Skates. New York: Charles Scribner's Sons.
- Driggs, Wilson. The White Indian Boy. Yonkers-on-Hudson: The World Book Co.
- Grahame, Kenneth. The Wind in the Willows. New York: Charles Scribner's Sons.
- Grimm, J. and W. K. Household Tales. New York: The Macmillan Co. Also Fairy Tales. Translated by Mrs. E. Lucas. Philadelphia: J. B. Lippincott Co.
- Guiterman, A. The Laughing Muse. New York: Harper and Brothers.
- 24. Harris, J. C. Uncle Remus, His Songs and His Sayings. Nights with Uncle Remus. Boston: Houghton Mifflin Co.
- 25. Haskell, Helen E. Katrınka. New York: E. P. Dutton & Co.
- Hawthorne, N. Wonder Book. Tanglewood Tales. Boston: Houghton Mifflin Co.
- Husband, Joseph. A Year in a Coal-mine. Boston: Houghton Mifflin Co.
- Ingersoll, Ernest. Book of the Ocean. New York: The Century Co.
- Jacobs, Joseph. English Fairy Tales. Celtic Fairy Tales.
   New York: G. P. Putnam's Sons.
- Kipling, R. Jungle Book. New York: Doubleday, Page & Co. Also Boys' Stories. Chicago: Rand McNally & Co.

- 31. Lagerlof, Selma The Wonderful Adventures of Nils. New York: Doubleday, Page & Co.
- 32. Lanier, Sidney (editor) Malory's Boys' King Arthur. New York: Charles Scribner's Sons.
- Lomax, John A. Couchoy Songs and Other Frontier Ballads. New York: The Macmillan Co.
- 34. MacManus, S. Doneyal Fairy Tales. New York: Doubleday, Page & Co.
- 35. Maeterlinck, Georgette L. Blue Bud for Children. New York:
  Dodd. Mead and Co.
- 36. Maeterlinek, Maurice The Children's Life of the Bee. New York: Dodd, Mead and Co.
- Morgan, A. P. Boys' Home Book of Science and Construction. Boston. Lothrop, Lee and Shepard Co.
- 38. Moses, Montrose. A Treasury of Plays for Children. Illustrated by Tony Sarg Boston. Little, Brown & Co., 1921.
- Parkman, Mary R. Heroes of To-day. New York: The Century Co., 1923.
- Pumphrey, Margaret B. Pilgrim Stories. Chicago: Rand McNally & Co.
- 41. Pyle, Howard. Pepper and Salt. Merry Adventures of Robin Hood. New York. Charles Scribner's Sons.
- Ramee, Louisa de la Bimbi Stories. Philadelphia: J. B. Lippincott Co.
- 43. Raspe, Rudolph E. Adventures of Baron Munchausen. Boston:
  Houghton Mifflin Co.
- 44. Richards, L. E. Captain January. Boston Page Co.
- Riley, J. W. A Host of Children. Indianapolis: Bobbs-Merrill Co.
- Roosevelt, Theodore. (Edited by Joseph B. Bishop.) Theodore
   Roosevelt's Letters to His Children New York: Charles
   Scribner's Sons.
- 47. Ruskin, J. King of the Golden River. New York: The Macmillan Co.
- 48. Sanford, C. M., and Owen, G. A. Modern Americans. Modern Europeans. Other Soldiers. Chicago: The Laurel Book Co.
- Seton, E. T. Biography of a Grizzly. New York: The Century Co. Also Lives of the Hunted, The Trail of the Sandhill Stag. Wild Animals I Have Known. The last three, New York. Charles Scribner's Sons.
- 50. Spyri, J. Heidi. Chicago: Rand McNally & Co.
- Steel, Flora Annie. A Tale of Indian. Heroes. Chicago: Scott, Foresman & Co.

- Stempel, G. H. A Book of Ballads. New York: Henry Holt & Co.
- Stevenson, Burton K. The Home Book of Verse for Children. New York: Henry Holt & Co.
- 54. Stockton, F. R. The Queen's Museum and Other Fanciful Tales. New York: Charles Scribner's Sons.
- 55. Swift. J. Gulliver's Travels. Chicago: Rand McNally & Co.
- Thackeray, W. M. The Rose and the Ring. New York: G. P. Putnam's Sons.
- Wade, Mary H. Real Americans. Boston: Little, Brown & Co., 1923.
- Wiggin, Kate D. Bird's Christmas Carol. Boston: Houghton Mifflin Co.
- Wiggin, Kate D., and Smith, N. W. (Comp.) Golden Numbers.
   New York: Doubleday, Page & Co
- Wilde, Oscar. The Happy Prince and Other Fairy Tales. New York: G. P. Putnam's Sons.
- Wyss, J. D. The Swiss Family Robinson. New York. Harper and Brothers.

#### II. MATERIALS NEEDED FOR WORK-TYPE OF READING

- A. Books containing expository and informational material.
  - Allen, Nellie B. Geographical and Industrial Studies. Boston: Ginn and Company. (North America, 1922; United States, 1910; South America, 1918; The New Europe, 1920.)
  - Barrows, H. H., and Parker, E. P. Geography Journeys in Distant Lands. New York: Silver, Burdett & Co., 1924.
  - Blaisdell, A. F., and Ball, F. K. Log-Cabin Days. Boston: Little, Brown & Co. 1922.
  - Brearley, H. C. Animal Secrets Told: A Book of Why's. New York: Frederick A. Stokes Co., 1911.
  - Brigham, A. P. From Trail to Railway Through the Appalachians. Boston: Ginn and Co., 1907.
  - Carpenter, F. G. How the World Is Clothed, How the World Is Fed. How the World Is Housed. New York: The American Book Co., 1923.
  - Carpenter, F. O. Foods and Their Uses. New York: Charles Scribner's Sons, 1907.
  - Chamberlain, J. F. How We Are Clothed. How We Are Fed. How We Are Sheltered. How We Travel. New York: The Macmillan Co., 1924.
  - Chapman, Frank M. Our Winter Birds. The Travels of Birds. New York: D. Appleton & Co., 1918 and 1916.

- Curtis, Mary S. Why We Celebrate Our Holidays. New York: Lyons and Carnahan, 1924.
- 11. Dole, C. F. Young Citizen. Boston: D. C. Heath & Co., 1899.
- Fairgrieve, James, and Young, Ernest. Homes Far Away. New York: D. Appleton & Co., 1923.
- Faris, John T. Real Stories from History. Boston: Ginn and Co., 1916.
- 14. Fisher Elizabeth F. Resources and Industries of the United States. Boston: Ginn and Co., 1919.
- Grant, Gordon. Story of the Ship. New York: McLoughlin Brothers, 1919.
- Hotchkiss, Caroline W. Representative Cities of the United States. Boston: Houghton Mifflin Co., 1913.
- 17. Jameson, H. L. The Flame Frend. Boston: Allyn & Bacon, 1921.
- Moseley, E. L. Trees, Stars and Birds. Yonkers-on-Hudson: The World Book Co., 1919.
- Nichols, M. L. Science for Boys and Girls. Philadelphia: J. B. Lippincott Co., 1924.
- Nida, S. M. Panama and Its Bridge of Water. Chicago: Rand McNally & Co., 1922.
- Nida, W. L. Following the Frontier. New York. The Macmillan Co., 1924.
- O'Shea, M. V., and Kellogg, J. H. Health Habits. New York: The Macmillan Co., 1921.
- Pack, Charles L. The School Book of Forestry. Philadelphia:
   J. B. Lippincott Co., 1922.
- Rocheleau, W. F. Great American Industries. Transportation. Chicago: A. Flanagan Co., 1914.
- Riggs, R. C. Animal Stories from Eskimo Land. New York: Frederick A. Stokes Co., 1923.
- Schwartz, J. A. Five Little Strangers and How They Came to Live in America. New York: American Book Co., 1904.
- 28. Turkington, Grace A. My Country. Boston: Ginn & Co., 1918.
- Waldo, L. M. Safety First for Little Folks. New York: Charles Scribner's Sons, 1918.
- Wells, Margaret E. How the Present Came from the Past. New York: The Macmillan Co., 1917.
- Wilson, Lucy L. W. (Ed.) Everyday Manners for American Boys and Girls. New York: The Macmillan Co., 1923.

# B. Magazines.

1. Nature Magazine. Washington, D. C.: American Nature Association.

- C. Books needed in developing ability to locate materials.
  - 1 Encyclopedia:

Compton's Pictured Encyclopedia. Chicago: F. E. Compton Publishing Co., 1922.

The World Book. Chicago: Hanson-Roach-Fowler Co., 1918

2. Dictionaries:

Webster's Elementary School Dictionary New York American Book Co., 1914.

Winston's Simplified Dictionary Chicago: J. C. Winston Co., 1921.

3. Atlas:

Goodes School Atlas. Chicago. Rand McNally & Co., 1923.

# THE FIFTH PERIOD

(Grades VII, VIII, and IX. This is the period of refining reading and study habits)

- 1. RECREATORY READING
  - A. Recreational Types of Oral Reading

Only such material should be read orally as is likely to be read aloud in real life. The audience attitude should be secured by having books in the hands of the reader only

Four literary types lend themselves easily to oral reading: poetry, short stories, plays, and informal essays. Poetry, which is dramatic in theme, and poetry which is not introspective may be used in the junior high school. A poem should nearly always be read to the children by the teacher, unless it is a child's particular choice and contribution to the oral reading lesson. Poems, such as ballads, which are unique in form should be read with copies in the hands of the children. Ballads and other poems set to music may be sung.

Short stories suitable for oral reading should be strong in suspense, must move fast enough to hold the interest, or be humorous.

Such plays as Julius Caesar, in which much of the real understanding depends upon the interpretation put into the words by the reader, should be read by the teacher with books in the hands of the children because of the difficulty of the form. Many plays, such as Six Who Pass While the Lentils Boil, The Knave of Hearts, and parts of Midsummer Night's Dreams, are simple in vocabulary and can be read aloud by children if desired.

Informal essays, particularly those with a humorous turn, such as Bergengren's Furnace and I, furnish interesting and profitable material for oral reading.

# B. Recreational Types of Silent Reading

All the literary types—poetry, short stories, plays, essays, novels, biography, and travel—can be utilized as silent reading material Much of this may be read in a rather cursory fashion but much should be used for class exercise for a better appreciation of content and presentation.

The novel is the most difficult to use for class study because of its length and because examples rich chough in interest and good enough in form are rare. Therefore, most novels should be read silently, with creative class discussion and oral reading of suitable bits.

Free reading in all the types should be extended, wide in range of interest, and carefully selected for literary and life values. Books for free reading should be single copies, attractively bound, and containing really illustrative pictures. The selection should include standard and contemporary literature, a very few current magazines, and factual material.

# C. Principles of Selection of Recreatory Material

- 1. The range of material should be wide in apparel and difficulty and should include selections from the literature of all peoples. In order to care for individual differences in reading ability, materials should present a wide range of difficulty.
- 2. Those books that are of recognized and permanent value should be given first place, though promising books as yet untried by time may be used for experimentation.
- 3 The books must bring to the individual, through vicarious experiences, the dominant ideals of society at its best, "its traditions, its thoughts, its customs."
  - 4. The books must be characterized by beauty of idea and form.
- The books must interest and entertain the individual, so that he will form the purpose and habit of reading books of a like type.
- 6. The books must serve as a proper criterion for helping the individual to recognize the permanent values in books.

# II. WORK TYPE OF READING

A. Relations to Other Subjects.

Much of the work type of reading may be handled in the content subject classes. The ability to use books should be mastered before the junior high school, so that special drill is no longer necessary. But in case such skills have not been perfected, the same types of materials should be used as in the preceding period under the direction of special teachers of reading. The content subjects lend themselves to excellent practice in all of the four classes of work-type abilities.

- B. Principles of Selection of Work-Type Material.
- 1. The material should decrease the child's desire to read.
- 2. It should enrich his stock of information and experience.
- 3. It must develop his judgment for purposes of evaluating, organizing and supplementing the material read.
- 4. The material must serve as a proper criterion for helping the individual to recognize the permanent value of books.
- 5. The work type of material in the junior high school should be graded to correlate with content subjects or used in any year as need demands.

# SPECIFIC RECOMMENDATIONS FOR THE FIFTH PERIOD

# (Fifth Period)

Neither the recreatory nor the work type of material should be arbitrarily graded, but its place should be determined by the age and experience of the children and the general plan of the course of study.

Selections starred (\*) may be used either as recreatory or as work-type material.

#### I. MATERIALS NEEDED FOR RECREATORY READING

## A. Books .

- Barrie, J. M. "Pantaloon" (Drama). Half Hours. New York: Charles Scribner's Sons.
- Brower, Harriette. Story-Lives of Master Musicians. New York: Frederick A. Stokes Co.
- Bulfinch, Thos. Age of Fable. Boston: Lothrop, Lee and Shepard Co.

- 4. Bullen, Frank T. Cruise of the Cachalot. New York: Grossett and Dunlap.
- Burroughs, John. Birds and Bees. Bunch of Herbs. Boston: Houghton Mifflin Co.
- Butler, E. P. Pigs Is Pigs. Garden City, New York: Double-day, Page & Co.
- 7. Cervantes, M. Don Quixote Retold (by A. E. Parry). New York: John Lane Co.
- 8. Church, A. J. The Iliad for Boys and Girls. New York: The Macmillan Co.
- 9. Cooper, J. F. Leatherstocking Tales. Boston: Houghton Mifflin Co.
- 10. Dana, Chas. H. Two Years Before the Mast. Boston: Houghton Mifflin Co.
- 11. Darton, F. J. H. Story of the Canterbury Pilgrims. New York: Frederick A. Stokes Co.
- Davis, R. H. Mins Civilization. New York: Charles Scribner's Sons.
- 13. Davis, R., and Getchell, F. G. Stories of the Day's Work.

  Boston: Ginn and Co.
- 14. De Amicis, E. An Italian School Boy's Journal. New York: T. Y. Crowell Co.
- Dickens, Charles. A Christmas Carol. David Copperfield.
   Oliver Twist (parts). Boston: Houghton Mifflin Co. Also
   Tale of Two Cities. New York: T. Y. Crowell Co.
- 16. Drinkwater, John. Abraham Lincoln (Drama). Boston:
  Houghton Mifflin Co.
- 17. Eggleston, E. Hoosier School Boy. Hoosier School Master. New York: Charles Scribner's Sons.
- 18. French, H. W. Lance of Kanana. Boston: Lothrop, Lee and Shepard Co.
- 19. Gale, Zona. Neighbors (Drama). New York: B. W. Huebsch, Inc.
- Gregory, Lady. Seven Irish Plays (Drama). New York: G. P. Putnam's Sons.
   Man (Drama). New York: G. P. Putnam's Sons.
- 21. \*Grenfell, W. T. Adrift on an Ice Pan. Boston: Houghton Mifflin Co.
- 22. Hale, E. E. The Man Without a Country. Boston: Little, Brown & Co.
- 23. Hawes, Charles B. The Mutineers. The Great Quest. Dark Frigate. Boston: Atlantic Monthly Press.

- Hawthorne, N. "The Great Stone Face." Tales of the White Hills. Boston: Houghton Mifflin Co.
- Hazelton and Benrimo. The Yellow Jacket (Drama). Indianapolis: Bobbs-Merrill Co.
- 26. Howells, W. D. A Boy's Town. New York: Harper and Bros.
- Hudson, W. H. Far Away and Long Ago. New York. E. P. Dutton & Co.
- Irving, W. Rip Van Winkle. Legend of Sleepy Hollow. New. York: The Macmillan Co.
- Keller, Helen. The World I Live In. Story of My Life. New York: Doubleday, Page & Co.
- Kingsley, Chas. Westward, Ho! Garden City, New York. Charles Scribner's Sons (illus.).
- 31. Kipling, R. Barrack Room Ballads. Captains Courageous Land and Sea Tales for Boys and Girls New York: Doubleday, Page & Co. Also Reader for Upper Grades. New York D. Appleton & Co.
- 32. London, Jack. Call of the Wild New York: The Macmillan Co.
- 33. Longfellow, H. W. Courtship of Miles Standish Evangeline Tales of a Wayside Inn. Boston. Houghton Mifflin Co.
- 34. Loti, Pierre. Iceland Fisherman New York. A. L. Burt Co.
- 35. Mackaye, Percy. Conterbury Tales New York Dated I & Co
- Masefield, John Jim Davis. New York: Grossett & Dunlap. Also Martin Hyde Boston Little, Brown & Co.
- Matthews, Brander (ed.). Poems of American Parriotism.
   New York. Chas Scribner's Sons.
- 88. Melville, Herman. Typec. New York: Harcourt Brace and Co.
- 39. \*Mills, Enos Wild Life in the Rockies. Boston: Houghton Mifflin Co.
- \*Morley, Elizabeth Bee People Song of Life. Boston Houghton Mifflin Co.
- Muir, John. Boyhood of a Naturalist. Stickeen. Boston. Houghton Mifflin Co.
- Noyes, Alfred A. Sir Francis Diake. New York: Frederick A. Stokes Company.
- 43. Official Handbook for Boys. Boy Scouts of America. New York: Doubleday, Page & Co.
- 44. Page, T. N. Marse Chan. New York: Chas. Scribner's Sons.
- 45. \*Parkman, F. Oregon Trad Boston: Little, Brown & Co.
- 46. Poe, E. A. Gold Bug. Boston: Houghton Mifflin Co.
- 47. Pyle, Howard. Men of Iron. New York: Harper & Bros.

- Rittenhouse, Jessie B. Little Book of American Poets. Boston: Houghton Miffin Co.
- \*Roosevelt, T. African Game Trails. New York, Chas. Scribner's Sons. Also Winning of the West. New York: G. P. Putnam's Sons.
- Scott, W. Ivanhoe. Lady of the Lake. Quentin Durward. Boston: Houghton Mifflin Co.
- 51. \*Scouting for Girls. Official handbook. New York: Girl Scouts.
- 52. Scoville, S. C., Jr. Wild Folk. Boston: Atlantic Monthly Press.
- Shakespeare, Wm. Julius Cwsar Midsummer Night's Dream. Tempest. Boston: Houghton Mifflin Co.
- Sharpe, D. L. A Watcher in the Woods. New York: The Century Co
- Stevenson, R. L. Kidnapped Treasure Island. New York: Chas. Scribner's Sons.
- 56. Stockton, F. R. Buccaneers and Pirates of Our Coast. New York. The Macmillan Co. Also Casting Away of Mrs. Lecks and Mis. Aleshine. New York: The Century Co.
- Tagore, R. The Post Office (Drama). New York: The Macmillan Co.
- 58. Teter, Geo. (ed.). One Hundred Narrative Poems. Chicago: Scott, Foresman & Co.
- Tolstoi, Leo Twenty-three Tales. New York: Funk & Wagnalls Co
- Twain, Mark. Connecticut Yankee. Adventures of Huckleberry Finn Adventures of Tom Sawyer. New York: Harper & Bros.
- Untermeyer, Louis. This Singing World. New York: Harcourt Brace & Howe.
- Warner, C. D. A Hunting of the Deer. Boston: Houghton Mifflin Co.
- 63. White, Stewart Edward. The Blazed Trail. New York: Grossett & Dunlap.
- 64. Whittier, J. G. Snow-Bound. Boston: Houghton Mifflin Co.
- Yeats, Wm. B. The Hour Glass (Drama). New York: The Macmillan Co.

# B. Magazines.

- Scientific American. New York: Scientific American Publishing Co.
- National Geographic. Washington, D. C.: National Geographic Society.

Nature Magazine. Washington, D. C.: American Nature Association.

Literary Digest. New York: Funk & Wagnalls Co.

Popular Mechanics. Chicago: Popular Mechanics Co.

Youth's Companion. Boston: Perry Mason Co.

St. Nicholas. New York: The Century Co.

(We recognize the fact that there is no really fine literary magazine suitable for people of junior-high school age.)

## II. MATERIALS NEEDED FOR WORK-TYPE READING

## A. Books.

- Adams, J. H. Harpers' Electricity for Boys. New York: Harper & Bros.
- 2. \*Addams, J. Twenty Years at Hull House. New York: The Macmillan Co.
- 3. \*Antin, Mary. The Promised Land. Boston: Houghton Miffiin Co.
- Babson, R. W. Future of South America. Boston: Little, Brown & Co.
- 5. Baldwin. Conquest of the Old Northwest. Discovery of the Old Northwest. New York: American Book Co.
- Beard, H. E. Safety First for School and Home. New York: The Macmillan Co.
- 7. Brooks, Noah. First Across the Continent. New York: Chas. Scribner's Sons.
- Brower, Harriette. Story-Lives of Master Musicians. New York: Frederick A. Stokes Co.
- 9. Burroughs, J. Camping and Tramping with Roosevelt. Boston:
  Houghton Mifflin Co.
- Clarke, C. R., and Small, S. A. The Boys' Book of Physics. New York: E. P. Dutton & Co.
- 11. Collins, A. F. The Boy Astronomer. The Boy Chemist. Boston: Lothrop, Lee & Shepard Co.
- Crissey, Forrest. The Story of Foods. Chicago: Rand-Mc-Nally & Co.
- Elson, H. W. Sidelights on American History, 2 vols. New York: The Macmillan Co.
- 14. Forman, S. E. Stories of Useful Inventions. New York: The Century Co.
- Franklin, Benj. Autobiography of Benjamin Franklin. Chicago: Rand-McNally Co.
- Freeman and Chandler. World's Commercial Products. Boston: Ginn & Co.

- 17. Gordy, W. F. Colonial Days. New York: Chas. Scribner's Sons.
- Hall, A. N. Boy Craftsman: Practical and Profitable Ideas for a Boy's Leisure Hours. Boston: Lothrop, Lee & Shepard Co.
- 19. Hardy, M. E. Plant Geography. Oxford, Eng.: Oxford Clarendon Press.
- 20. \*Hasbrouck, L. S. Boy's Parkman. Boston: Little, Brown & Co.
- 21. \*Hawksworth, Hallam. The Adventures of a Grain of Dust.

  The Strange Adventures of a Pebble. New York: Chas.
  Scribner's Sons.
- 22. \*Hawthorne, N. Grandfather's Chair. Boston: Houghton Mifflin Co.
- 23. Herbertson, A. J. and F. L. D. Man and His Work. New York: The Macmillan Co.
- 24. Hornaday, W. F. American Natural History. New York: Chas. Scribner's Sons.
- Hunter, G. W. and Whitman, W. G. Civic Science in the Community. Civic Science in the Home. New York: American Book Co.
- 26. Johnston, R. M. Napoleon Bonaparte. New York: Holt and Co.
- 27. Jordan, D. S. The Strength of Being Clean. Boston: Beacon Press.
- 28. Keller and Bishop. Commercial and Industrial Geography.
  Boston: Ginn & Co.
- Lescarboura, A. C. Radio for Everybody. New York: Scientific American Publishing Co.
- 30. McIsaac, T. J. The Tony Sarg Marionette Book. New York:
  B. W. Huebsch.
- 31. McMurry, C. A. Pioneers of the Rocky Mountains and the West. New York: The Macmillan Co.
- 32. Meadowcroft, W. H. Boy's Life of Edison. New York: Harper & Bros.
- 33. Mowry, A. M. American Inventors and Inventions. New York: Silver Burdett & Co.
- 34. Muir, J. Our National Parks. Boston: Houghton Mifflin Co.
- Newbigin, M. S. Animal Geography. Oxford, Eng., Oxford Clarendon Press.
- Nicolay, Helen. Boy's Life of Lincoln. New York: The Century Co.
- 37. Paine, A. B. Boy's Life of Mark Twain. New York; Harper & Bros.
- Parkman, F. Struggle for a Continent. Boston: Little, Brown & Co.

- Pierey, Willis D. Great Inventions and Discoveries. New York: Chas. E. Merrill Co.
- Pinchot, G. Training a Forester. Philadelphia: J. B. Lippincott Co.
- 41. Price, O. W. The Land We Live In. Boston: Small, Maynard & Co.
- 42. \*Riis, J. A. The Making of an American. New York: The Macmillan Co.
- 43. Roosevelt and Lodge. Hero Tales from American History. New York: The Century Co.
- 44. Southey, R. Life of Nelson. Boston: Houghton Mifflin Co.
- 45. Slosson, E. E. Creative Chemistry. New York: The Century Co.
- Smith, J. Russell. Commerce and Industry. World's Food Resources. New York: Holt & Co.
- Southworth, G. Van D. Builders of Our Country. New York:
   D. Appleton & Co.
- Sparks, E. E. Men Who Made the Nation. New York: The Macmillan Co Also Expansion of the American People. Chicago: Scott Foresman Co.
- 49. \*Stanley, H. M. In Darkest Africa. New York: Charles Scribner's Sons.
- 50. Tappan, E. M. American Hero Stories. Boston: Houghton Mifflin Co.
- 51. Taussig, Chas. W. Book of Radio. New York: D. Appleton & Co.
- Thomas, Jas. L. Fundamentals of Radio. New York: D. Van Nostrand Co.
- 53. Thwaites, R. G. Daniel Boone. New York: D. Appleton & Co.
- 54. \*Van Loon, H. H. The Story of Mankind. New York: Boni & Liveright.
- 55. \*Washington, B. T. Up from Slavery. New York: Doubleday, Page & Co.
- Weston, W. H. Plutarch's Lives Retold for Young People. New York: Frederick A. Stokes Co.

# CHAPTER VIII

## PROVISION FOR INDIVIDUAL DIFFERENCES

Inadequacy of prevailing practice. It is comparatively easy to demonstrate the wide range of reading abilities and interests represented by the members of a single class or grade or age group. It is not so simple to demonstrate the inadequacy of traditional procedures or to initiate effective provisions for individual differences. Numerous plans have been devised with this end in view. but there is as yet no general realization of the utter inadequacy and sheer waste of traditional reading recitations. Whole classes are required to attend and keep the place while pupils read orally in turn. Interest which forges ahead is benalized. Teachers who would not deign to consider such obsolete practice as reading in concert. thus rest content with procedures which are psychologically equivalent. Whole classes are provided with the same articles of reading diet on the same day. Too often the diet is meager and the daily portion insufficient. Freshness and variety are noticeably lacking. Selections are served and rehashed so many times that appetites are systematically dulled. Or, when silent reading assignments permit each pupil to read at his own rate, those who finish first are expected to sit idly by until told what to do. Again, there is a premium on listlessness and often a penalty for the child who reads on or engages in other forbidden activities. After a sufficient lapse of time or at arbitrary signals from the teacher, all pupils stop reading and move together to some other concert activity. These procedures are so manifestly unsuited to the attainment of sound objectives and so obviously productive of poor attitudes, that one can but marvel at their prevalence and persistence.

Range of abilities within classes. Standardized reading tests reveal surprising differences in achievement within groups of the same age, grade, or class.<sup>2</sup> When the range of abilities within a class is wide, instruction and materials which are adjusted to the

<sup>&</sup>lt;sup>1</sup> Judd, C. H., "Relation of school expansion to reading," *Elementary School Journal*, 22 (December, 1922), pp. 253-266.

<sup>&</sup>lt;sup>2</sup> Kelley, T. L., Ruch, G. M., and Terman, J. M. Manual of Directions for the Stanford Achievement Test. Yonkers-on-Hudson: World Book Company, 1924. Pp. 58-59.

needs of the upper end of the class distribution can hardly be well adapted to the abilities of pupils in the lowest third of the class.

Desirable changes. One measure of the effectiveness of reading instruction is the amount of time during which each pupil is actually engaged in reading, at his own rate, material from which he is deriving adequate meaning and satisfaction. Such provision for individual differences does not necessitate great expenditure of money and is entirely within the reach of any school whose teachers are alert One or two copies of a number of books can be purchased as easily as whole sets of supplementary books. Pupils should have in their desks or on reading tables something to read, and feel free to read it when not otherwise engaged. Pupils who do not need review experience should be excused to do extensive reading. The reading which pupils and adults do outside of school hours is usually purposeful, engaging, informal. Instruction in reading should prepare pupils to choose and care for worth-while books, by providing opportunities for choice, incentives to leisure reading, and varied and abundant experience in purposeful silent reading. The attainment of these objectives is not likely unless teachers are roused to a critical consideration and selection of ways and means.

Needs revealed by scientific studies. The terms reading groups. individual instruction, diagnostic teaching, and remedial work, are ones with which the teacher of to-day has to reckon. Scientific studies and survey results 3 have brought to her door several very pertinent facts which reveal:

- 1. The necessity of provision for individual differences in reading ability, tastes, and interests in reading.4
- 2. The necessity for meeting such differences by:
  - a. Changes in method.
  - b. Changes in class organization and management.
  - c. Variety in materials.

Judd, C. H., Measuring the Work of the Public Schools. Cleveland

Education Survey Reports, 1916.

4 Jordan, A. M., Children's Interests in Reading. Teachers College Contributions to Education, No. 107. New York: Teachers College Bureau of Publication, 1921. P. 143.

Uhl, W. L., Scientific Determination of the Content of the Elementary School Course in Reading. University of Wisconsin studies in the Social Sciences and History, No. 4. Madison: The University of Wisconsin, 1921. P. 152.

<sup>8</sup> Courtis, S. A., The Gary Public Schools: Measurement of Classroom Products. New York: General Education Board, 1919. Pp. 445.

The following questions are immediately suggested by such considerations: How may a teacher group her class? What are the bases for grouping? How does she manage a number of groups simultaneously? What is her procedure? When does she get time to help the poor reader? What and how does she teach? How does she meet the individual needs? Under what circumstances, if ever, may a whole class be handled as a unit?

Although other parts of this report answer some of these questions, certain direct suggestions may be in place here.

Bases for grouping children. Flexible grouping is usually preferable because needs change. Pupils may be grouped on the basis of reading ability and needs, as determined by standardized or informal tests. Independent work may then be provided for able readers, in order that the teacher may be free to guide and help pupils who are more or less deficient. Varying tastes and interests are the bases for the selection of varied materials and also point to the need for an organization of classroom procedures which permits a reasonable amount of choice in the selection of materials. Sometimes pupils elect to work or read in pairs or groups. This type of grouping provides opportunity for audience situations without requiring whole classes to attend to the same selection. Sometimes grouping is necessitated by material conditions; for example, there may be but a few books of a kind or a play may require but a few characters.

The teacher's function. This changes according to the purpose or manner of grouping. On some days, the teacher acts chiefly as expert observer, recording and checking on habits and methods of work. On other days, she acts as helper, adviser, and guide, stimulating the pupils to worth-while activity and calling their attention to materials or means of attaining their purposes. Again, the teacher administers special work with small groups or individuals, after making provision for suitable activities for other groups. In other words, no one plan should be followed day in and day out.

Multiple assignments. Sometimes, the provision for individual differences is managed by multiple assignments. One minimal assignment is accompanied by optimal assignments. When children complete the minimal assignment, they are free to choose from a number of proposed reading activities, all of which are planned to enlist interest and enthusiasm. By another plan, two or three assignments

are based on books of similar content, but varying difficulty. This requires small sets or groups of books. Abler pupils use the more difficult material and work on assignments which enlist real effort. The same plan can be adapted to provide for varied interests.

In providing special training another type of multiple assignment is desirable. Pupils who need various types of training are selected by informal or standardized tests.<sup>5</sup> For those who do not need this training, other reading opportunities or responsibilities are provided. The two groups which are in need of special training are handled in turn as follows: Group I practices or studies independently while Group II receives specific training from the teacher. Group II takes a practice test or studies while Group I receives another type of training, according to the specific needs previously revealed.

During the free reading period, the teacher has occasion to study pupil interests and to aid in the selection of reading materials which will broaden interests, elevate tastes, and contribute to permanent attitudes toward reading as a leisure activity.

General references. For the professional study of such problems there are a number of general and non-technical references which provide constructive suggestions.6

Class work. It must not be inferred that the handling of a class as a whole is always objectionable. The following are types of reading activity in which a class may engage as a whole:

- So-called appreciation lessons in which pupils enjoy together some literary unit which is read by the teacher or by pupils who have had opportunity to select material and prepare themselves to read it for the express purpose of sharing their enjoyment and appreciation with their classmates.
- Reading activities based upon material to which slower 2 pupils may respond by reading silently at their rate level.

<sup>5</sup> See Chapter IX of this Yearbook.

Germane, C. and Germane, E. Silent Reading, Chicago: Row. Peter-

son and Co., 1923. P. 383.

Leonard, S. A. Essential Principles of Teaching Reading and Literature. Philadelphia: J. B. Lippincott Co., 1922. P. 460.
Penell, M., and Cusack, A. How to Teach Reading. Boston: Houghton

Mifflin, 1924.

Stone, C. R. Silent and Oral Reading. Boston: Houghton Mifflin. 1922. Wheat, H. G. The Teaching of Reading. Boston: Ginn and Co., 1923.

while able, rapid readers are freed for further reading, other significant activity, or additional assignments.

- 3. Reading of bulletins, blackboard material, or communications related to class activities which require class planning or are matters for discussion.
- Situations in which individual differences are provided for in the materials, although the class is managed as a whole.
- 6. Test situations expressly arranged to reveal individual differences and the range of abilities within a class.

Quite the opposite of mass methods is proposed by those who advocate individual instruction as the solution of the problem of providing for individual differences. Fortunately we are not obliged to choose between the two extreme positions, for no doubt the best way lies somewhere between the two or in a combination of group and individual work. The most advantageous combination or compromise is the practicable plan which permits each pupil to reach his fullest measure of growth with the least waste and most abundant satisfaction.

Most mass methods are of administrative origin and have little pedagogical sanction. They originated in an era, the psychology, sociology, and pedagogy of which are now passé, and nothing but professional inertia accounts for their prevalence in this day and generation. Mass methods are largely accountable for the utter artificiality and cold formality of the typical oral reading recitation, and the cramping, devitalizing effects of thoroughly mechanized, over-routinized school work.

Reading in special classes. The limitations of space prevent a full discussion of the reading needs of special classes, but the chapters on informal tests and diagnostic and remedial work contain numerous suggestions that are applicable.

Reading in rural schools. Provision for individual differences is doubly necessary in rural schools and other situations where more than one grade must be handled by one teacher. The proposals of this chapter and the two which follow will suggest ways and means of organizing groups to meet varied needs.

The improvement of instruction. In the light of what has been said concerning individual differences, it is obvious that the teacher can do much to meet the needs of individuals. The habit of studying

her own procedures, of observing pupil reactions, and of discovering budding tendencies and habits will do much to prevent deficiency, and continuous supervision of learning will reduce the numof serious remedial cases by giving immediate attention to wrong tendencies. Skews of emphasis in reading instruction must be carefully avoided lest one-sided or narrow development results. Routine recitations must be superseded by purposeful instruction if pupils are to be expected to work at a high level of attention.

It is not safe to assume that causes of reading deficiency are always in the pupil. Open-minded study of all the factors which may have a bearing on pupil progress is essential. Lack of effort or interest or ability may be due to factors over which the pupil has no control. The search for ways and means of improving instruction must leave no factors unexplored. Thus, the study of pupils' needs and reactions may point to the necessity for new materials and broader objectives, and reorganized procedures. To equip themselves for this type of professional advance, teachers will need to become acquainted with the newer types of teaching materials which have been developed for just such purposes. Among these are certain forms of pupil records and graphs, practice materials. and informal and standardized reading tests.7

By availing themselves of these aids to effective classroom work. teachers will not only find ways of improving their teaching technique, but will also increase the satisfaction of professional endeavor.

<sup>7</sup> Chapter IX of this Yearbook.

Germane, C. E. "Outlining and summarizing compared with re-reading as methods of study." Twentieth Yearbook of this Society, Part II. Pp. 103-113. Bloomington: Public School Publishing Co., 1921.

Heller, R. R. and Courtis, S. A., "Exercises developed at Detroit for making reading function." Twentieth Yearbook of this Society, Part II. Pp. 153-191. Bloomington: Public School Publishing Co., 1921.

Horn, E., Brown, M. E., Potts, C., Carswell, M. "The teaching of reading." Second Yearbook of Department of Elementary Principals of the N. E. A. Pp. 287-382. Washington: Department of Elementary School Principals 1922 Principals, 1923.

# CHAPTER IX

# READING TESTS-STANDARDIZED AND INFORMAL

For the purposes of this report, reading tests may be classified under two heads: standardized and informal. Both types of tests are valuable, but each type has its own characteristics and its specific function. This section treats of standard and informal tests, describing the former and providing numerous illustrations of the latter. Both types of tests disclose individual differences and show the necessity for provisions which take such differences into account.

# A. INFORMAL READING TESTS

The emphasis in this chapter has purposely been placed on informal testing because, in the opinion of the committee, the improvement of instruction in reading depends in a great measure on the systematic measurement of attainment with reference to numerous specific objectives. This necessitates the use of informal tests. Most of the illustrative informal tests in this chapter have been successfully used in an experimental way. But the true function of informal tests is best served when the tests are made to suit the material and the situations in which they are to be used. Setting up objectives or purposes and testing for the outcome of instruction will encourage a critical and professional attitude toward the whole reading problem and give a basis for the analyses of learning and teaching upon which the improvement of educational procedures depend.

# INFORMAL TESTS AND RECORDS FOR THE PRE-READING STAGE

Standardized reading tests do not reach down into this stage, but readiness for reading can be studied by other methods. Teachers who wish to plan their initial instruction with reference to the readiness of pupils will find the following suggestions helpful.

- a. Observe and record pupils' reactions toward stories and picture books.
- b. Ascertain to what extent pupils are beginning to associate specific rhymes or sentences as wholes with appropriate illustrations.

- Give some informal tests of the richness or extent of oral vocabulary.
- d. Ascertain whether pupils are beginning to observe gross differences and similarities. See whether the children can differentiate between two rhymes of varying length, between long and short sentences which begin alike, between words which are very dissimilar. Observations of this sort should be made individually or incidentally.

# INFORMAL TESTS FOR THE INITIAL PERIOD OF READING INSTRUCTION

a. Inventory test and interview. In addition to the data on intelligence and personal history, there should be some means of inventorying reading attitudes and attainments at the very outset. This may be done by means of an informal inventory or personal interview. The following questions may be used when children are taken individually and they can be adapted to group situations. The teacher prepares record blanks containing these or similar questions, and places for recording data on each child. The necessary materials should be prepared in advance.

# Record Sheet for Interview

One of these cards tells your name. Which one is it? ———
One of these cards tells how old you are. Which one is it?
I am sure you like to play outdoors. What do you like to play best
of all? ———
Who plays with you? — Have you any brothers or
sisters?
Have you any pets? ———
What toys have you at home? — Tell me which toys you like
best of all? ———
Do you have any books? — What do you like to do with
books? ———
Did you ever have any lessons with books?
Can you read a little? ———
Does anyone ever read to you?
(Inquire how much, whether regularly, etc.)
What stories do you know?
Do you know any rhymes? ———
(Illustrate by Humaty Dymaty or Little Inch Homes)

Do you know what any of these cards say? ----(Show four or five word cards, all of which are names of common animals. If there is no response, wait a bit before suggesting that they are all names of animals. Make note of all responses.) Perhaps you have seen these words at home or on signs. Tell me which ones you know. ---(Show four or five cards that contain in large print words which are common in the pre-school environment, as hot, cold, stop, go, mail, cent, exit, milk, soap, store, danger, cash, St., once, sugar, sale, oats, grocer.) (Expose a series of cards on which the following lines are typed or printed in type slightly larger than primer size. Arrange these cards in the order here given.) One. two, three Ha, Hi, Ha No, no, no a bumble bee a big black bear 123 654 879 a cat and a dog Merry Christmas a bumble bee (Ask the following questions in order and make note of responses.) Can you point to the line that has numbers in it? Say the numbers as I point to them. ----(Point in the order printed. If the child points to the first line or card, ask him to tell you what it says, and then say:) Now see if you can find a card that has real numbers like house numbers or car numbers. Point to two cards that are exactly alike. ----(Report relative ease of recognition in terms of time or procedure.) Point to the card that says Merry Christmas. -Now look at all the cards. Point to the card that says the same thing over and over. -Point to the card that says a bumble bee. There is a card that says a big black bear. Point to where it says Show me where it says big. ----

This test many be abbreviated for children who show no interest or readiness to respond. This fact should be noted in the record. For children who cannot respond satisfactorily to any of the ques-

on cat. ----

One card says a cat and a dog. Put one finger on dog and another

tions, suitable initial instruction is manifestly very different than for those who can actually read. For the latter there should be some record of habits, quality of performance, and rate on a simple paragraph; preferably use the first paragraph of the Gray Oral Reading Test. The test does not set standards, but makes it possible for teachers to study the comparative abilities of pupils at the beginning of the first grade.

During the first few weeks of school, the teacher should look for evidences of the ability to detect gross differences or similarities in sentences, rhymes, phrases or words, as occasion arises in the regular activities. Difficulty in realizing that two words or phrases are identical is extremely significant. Children who cannot do this readily are not ready to see gross differences or to make finer discriminations. Matching exercises may be used as informal tests, but should be discontinued as soon as ready recognition is evidenced.

- b. Ascertain whether pupils are over dependent on positional clues. Selected portions of stories should be placed on phrase cards and shuffled. Children who have excessive difficulty are usually those who have found a 'short-cut' method of getting material either by rate or by position and who are likely to assume that such associations are adequate to reading needs. This test is therefore useful to detect cases which need guidance beyond that point.
- c. Ascertain to what extent pupils realize the meaning of phrases out of familiar context, without saying the words of each phrase. This is not only a test, but also an opportunity for practice or review with the vocabulary of stories previously read.

The teacher says: "Point to the right thing in the right picture in your book." The teacher exposes the following phrases, one at a time, on the blackboard or on large phrase-cards (any reader containing pictures full of action may be used in this manner).

The pupil responds by pointing to the proper thing.

The old man's bag
The gold on the floor
The window
The man at the window
The old man in bed

The hole in the bag
The gold that fell out
The fairy
The fairy's wand
The children
The yellow dandelions

d. Ascertain whether the children can recognize phrase meaning

when phrases from stories are introduced in questions. The teacher says: "This is a game called 'Who.' Every card begins with this word, 'Who.' You must point to the right answer in your book."

Variations: (a) You must point to the right picture in your book to answer the question. (b) You may pick out the card or answer from those on the chalk tray or blackboard. (The only new word is "Who.")

Who went to market?
Who came to the door?
Who had a bag?
Who opened the bag?
Who caught the bumble bee?

Who put the pig into the bag? Who ran after the pig? Who let the little boy out? Who went to the woods? Who had a fine dinner?

e. Ascertain whether children can comprehend questions in which familiar statements are paraphrased. The teacher says: "Each card in this game begins with 'What.' Open your books to the story and answer by reading the right words. The right words are the ones that tell 'What.'" (Notice how the order of the words is changed by using these questions. Verb forms are also changed.) Or the teacher says: "Be ready to answer the question" (orally).

What did Peter Rabbit hear?
What did the dogs say?
What did Peter Rabbit say?
What did the horse do all day?
What did the horse say?
What did the cow say?
What did the goat say?
What was the goat afraid of?
What did Peter Rabbit think?
What did he do?

f. Ascertain whether the children can silently read and grasp the organization or sequence or relation of ideas in a selection when the exact wording is changed. This also gives pupils review experiences with rearranged vocabulary of stories previously read and tests their reading ability in the use of that vocabulary.

The teacher gives pupils envelopes containing shuffled cards, on each one of which appears one of the following sentences. The teacher says: "Arrange these cards to show how things happened in the story." (Any story with sequence may be used. This one is merely illustrative. Notice that the sentences are framed to stress sequences.)

A little girl wanted to find the stars. She went out to find them. First she came to a pond. Then she met some fairies. After that she met an elf. Then she met a horse. His name was Four-feet. Four-feet took her to No-feet. He was a fish. Next she came to Stairs with no steps. That was the rainbow.

g. Ascertain whether the children can complete sentences and organize them into a story from incomplete visual cues. Unfinished sentences based on a story previously read are put on the black-board or on cards. The same idea can be used with sentences based on class experiences. Pupils are told to study to see whether they can read the sentences as though the whole story were there.

The goat saw ———	
They had to cross ———	
When they went over the bridge they heard -	
This is what he said ———	
Next came the ———	
He said ———	
Last of all came the	
He said ———	
The troll tried to ———	
The troll fell	

h. Ascertain whether the children can select related meanings and put them together. The following questions and mixed lettered answers, based on content material previously read, are placed on the board.

The teacher or pupil calls out the number of a question. The pupils all read the question silently, find the appropriate answer, and respond either by reading it or by setting down its letter. A few incorrect answers may be added so that the children do not answer by elimination.

- 1. Who was Rago's sister?
- 2. When did they live?
- 3. Where did they live?
- 4. How many children were there?
- 5. Who was oldest?
- 6. Who was youngest?
- 7. What did their mother carry on her back?
- 8. Where did they all sleep?

- a. the baby
- b. far, far away
- c. five
- d. three
- e. two
- f. Rago
- h. in the trees
- i. the baby
- j. long, long ago
- k. in beds
- l. John
- i. Test factual comprehension. Incidentally, this gives new reading experiences based on material previously read, preferably on factual material related to class experiences. Some early experiences should be with animals. This illustration presupposes class experiences with frogs.

Each child is supplied with cards, on which the words yes and no are printed, and with number cards. Or pupils may write or print yes or no beside the numbers which they write on a slip of paper. This technique makes it possible to use the exercise or test with a group or as seatwork.

The teacher says: "Read the first question and answer it by yes or no. Then read the next sentence and answer it. Try to answer all of them."

- 1. Do frogs lay eggs?
- 2. Did you ever see a frog's egg.?
- 3. Do frogs' eggs have hard shells?
- 4. Do frogs lay very many eggs?
- 5. Are frogs' eggs as big as marbles?
- 6. Do frogs sit on their eggs until they hatch?
- 7. Are frogs' eggs found on the ground?
- 8. Did you ever see a pollywog?
- 9. Do pollywogs have tails?
- 10. Do pollywogs turn into frogs?
- 11. Do frogs have tails?
- 12. Can pollywogs swim?
- 13. Do young pollywogs have legs?
- 14. Do frogs have only two legs?
- 15. Do pollywogs ever have two legs?

j. Test to see whether children can select true from false statements. From a group of sentences on the blackboard or on type-written sheets, pupils are asked to cross out all the untrue sentences. The content should be familiar. Variation: The sentences may also be printed on separate cards. In that case pupils are asked to sort out the untrue cards.

Bread is made of wheat.
Bread is made of stones.
Bakers sow the wheat.
Farmers sow the wheat.
The birds eat all the wheat.
The wheat grows tall and ripens.
The baker makes the wheat.

- k. Test ability to grasp related meanings and to express and interpret ideas by means of simple drawings. Each pupil receives a card containing a rhyme or paragraph with directions to be followed. This idea need not be illustrated here.
- l. Test to see whether children can keep the place. Each child is supplied with a copy of a mimeographed, hectographed, or printed story. The printed or typed lines should not be longer than four inches and the print should be as large as that in the reader. The teacher reads at a normal rate, phrasing the words properly. The children are told to keep the place with their eyes, without pointing to words, and to draw a line after every word on which she stops. The teacher marks her own copy before she reads and uses it in scoring. Stops should not come on adjacent lines. Pencils should be pointed upward when not in use.

The following variations are suggested. (1) When testing individuals or where the training value alone is desired, children may be asked to complete the sentences orally to show where the teacher stopped. (2) Using similar materials, the teacher reads a part of a story and stops at an opportune place, giving the children a direction concerning the next sentence. This test, or exercise, gives practice in place-keeping, following directions, and search for a specific idea. It requires alert attention and gives practice in reading at a high level of attention. An illustration is given:

The teacher reads: "Once upon a time there was an old man." The

teacher says: "The next sentence tells what he loved. Draw a line under the word that tells what he loved. (Pause.) The next sentence tells what the old man made for his friends. Find the word that tells what he made and draw a line around it. Now read on. Draw a line under every word in the next line that tells what the old man did in spring." Pause while the children read silently. "The old man loved birds. He made houses for them and put them in the trees all around his own house. In winter when food was hard to find, he fed his bird friends. In spring he made a bird garden. In the middle of the garden there was a bird bath. There were also many kinds of shrubs which birds liked. The birds were not afraid of the old man. They often sat on his arm and ate crumbs from his hand."

The following directions illustrate the further development of the idea.

The teacher goes to the board and sketches an oblong to represent a garden. She says: "Suppose this was a garden. Find out what was here (putting a ring in the center) in the garden. Draw a ring around the words that tell.

"Find two things that show that the birds were not afraid of the old man. Underline the words that tell whether the birds were afraid of the old man. Show what proves it."

Variation: Children read the whole selection. Directions similar to those given above are put on the blackboard and followed without the teacher's participation. This use of the exercise requires less alertness, but has compensating values.

m. Test each pupil's ability to recognize words in isolation in a way which requires attention to meaning rather than mere word calling. Words from previous reading experiences are to be selected to fit the following or similar classifications: (a) names of animals, (b) colors, (c) words of action or words that tell something to do, (d) things made of wood, (e) things to eat or drink, (f) things to wear, (g) words that tell where, (h) words that tell who (persons), and (i) words that tell how many. Words under two or three of the classifications are then grouped with a few irrelevant words of similar form or appearance. Children are required to select, pronounce, or mark all the words of a given classification.

Variations: (1) Separate word cards may be used. Classification cards may be made of another color. Pupils organize a shuffled pack of word cards under the given classifications, culling out into a separate file words which do not fit any classification.

(2) A similar exercise can be arranged using incomplete sentences instead of classifications. The children are told to find all the words which could be used to complete each sentence as follows:

I like	to eat ———	I put on my
Some	flowers are	I went to ———

The first column of words given below could be used for colors, numbers, and animals. Irrelevant words similar in form are included. The second column contains words which refer to size, persons, clothing. The third column may be used for foods, actions, places. The lists could, of course, be much longer.

rat	hat	bread
red	had	break
three	man	up
tree	little	sing
blue	pig	porridge
bird	big	jump
four	mother	read
yellow	coat	red
squirrel	boy	meat
green	small	down
sick	shoe	run
six	father	come
dog	farther	corn
duck	girl	here
.ten	lady	her
then	large	go
blue	baby	dinner
wheat	dress	walk
white	John	talk
dig	tall	goat

n. Test comprehension of total meaning of selections longer than one sentence. For this, use words well within the visual vocabulary of children. Riddles like the following as used as silent reading material. The tendency to respond with fragments of meaning or to leave out certain important elements may be corrected if similar practice exercises follow the use of this informal test.

1

It is black all over.

It likes corn.

What is it?

It savs caw caw.

What is it?
It is not black.
It grows.
It has many blades.
It is like a carpet.
It covers the ground.
It grows in spring.
Sheep eat it.
Men cut it.
Chickens like it.
The hot summer sun burns it.
The snow covers it.
What is it?

2

INFORMAL TESTS FOR THE PERIOD OF RAPID GROWTH IN FUNDA-MENTAL READING ATTITUDES, HABITS, AND SKILLS

# (Second and Third Grades)

Many of the suggestions given for the first grade are applicable to the second grade as well, if adapted to second-grade materials, interests, and abilities. It is well to use informal tests which have easy, satisfying responses. The unnecessary use of written responses is likely to interfere with the satisfaction to be derived from reading. The strain and time expenditure involved in tests which require writing and spelling may be reduced without loss. The following illustrations are chosen because they are somewhat different from those already given.

- a. Test comprehension and ability to select pertinent or relevant ideas. Directions to pupils (on blackboard or on a card accompanying sentences or sentence cards):
  - 1. Select (or mark) the sentences that are true about rabbits.
  - 2. Pick out the ones that are true about trees.
  - 3. Pick out the sentences that are true about children like you.

(If sentences are on the blackboard and numbered, pupils may be directed to draw a rabbit and put under it the numbers of the sentences that are true about rabbits, etc.)

- 1. They have long ears.
- 2. They have a great many limbr.
- 3. They love to play games.
- 4. They can sing pretty songs.

- 5. They have soft warm fur.
- 6. Some of them have beautiful pink eyes.
- 7. Some of them have curly hair.
- 8. Some of them have green needles.
- 9. Some of them have leaves.
- 10. They live in holes in the ground.
- 11. Some of them are hundreds of years old.
- 12. They have very short tails.
- 13. They have four legs.
- 14. They have two hands.
- 15. They have roots under the ground.

Variations: Similar exercises may be used with phrases or sentence endings or with content based on group interests or experiences. These may be placed on phrase cards, on the blackboard, or on hectographed or mimeographed sheets.

Directions: Mark or pick out the true endings.

The Indians of long ago times

had homes like ours.
lived in castles.
lived in wigwams or tepees.
rode in automobiles.
wore clothes made of animal
akins.

lived in big cities.

had to hunt for their food. bought everything in stores. used sign language. had war dances. used money like ours. made ships of steel. made cances of birch bark.

- b. Test ability to follow directions, get the thread of the story, and express meanings in simple drawings. (1) Draw a picture to show what the old woman's magic brought to the hungry little girl.
- (2) In your second picture show what became of the goat's heart.
- (3) Now show where the little girl was when the prince came.
- (4) Show how the story ends.

Such directions require real grasp of story content and are far superior to arbitrary directions not based on reading material.

c. Test thoroughness or completeness of comprehension. Illustration: "Name all those who helped the girl find her way to the castle." In this case four replies were possible. The pupil who named but one person showed only partial success and got partial credit.

Other illustrations: "What did the Pilgrims have to eat at the feast?" "What did the poet Whittier do in the summer when he

was a boy living on a farm?" In each case there are several items to be given.

d. Test pupil's grasp of relationships or of the modification of meaning which depend on prepositions and other modifying words (practice in accurate comprehension and imagery). Exercises containing numerous modifiers are used. Pupils read the directions through before beginning to draw, and refer to them while drawing.

The same purpose may be served by using exercises like the following, based on stories or activities. After reading the story silently, the pupil receives an envelope containing the following questions and answers, each on a separate card. He is told to arrange the questions with appropriate answers, eliminating superfluous or untrue answers. The cards are purposely mixed and some answers occur twice.

(1) Who had the right to eat all the meat that fell to the floor?

Who gave him that right?

Who destroyed the paper?

Who caused the trouble between the cats and dogs?

The queen The prince
The king The mice
The dog The rats
The cat The mice

(2) Directions: Find the right beginning for each ending or vice versa. (Beginnings and endings are shuffled. Careful selection of test sensitive endings which cause confusion.)

The Indians planned the first Thanksgiving Day.

The Pilgrims were asked to come.

The mothers carried home wild ducks and turkeys for the feast.

They all gathered plums and grapes.

The children brought five large deer.

The fathers made bread and cake and pumpkin pies.

The Indians thanked God for his goodness.

e. Test accuracy of perception. Each child is provided with a pack of cards containing similar words. He is to sort out the cards into three piles. The first pile is for words that are just alike; the second is for words that mean about the same thing but are not exactly alike; the third is for words that look much like the other words but mean something entirely different. The ease with which the child differentiates is as significant at the accuracy with which the words are sorted.

The following illustrative lists show the words when properly sorted. Notice that some words are repeated. Hesitancy in the recognition of these words is extremely significant.

1. come	came	cone
come	comes	cane
come	coming	canning
come		care
come		cave
còme		cunning
		cared
		cares
		comb
		common
2. begin	began	belong
begin	be <b>gun</b>	bein <b>g</b>
begin	beginning	belong
begin	begins	behind
begin	beginnings	before
begin		beyond
		because
		became
3. thought	think	thank
thought	thinking	though
thought	thoughts	tough
thought	thoughtful	through
thought	thinks	taught
		thou
		thin
		brought
		truly
		thankful

Variations: (1) After this exercise, the cards may be shuffled and pupils may be asked to find all the words that begin with th, or all words that end with gh, etc. (2) The same cards may then be laid out and pupils may be asked to select words that fit in certain unfinished sentences like the following:

The	meat	was					
I —		- he	was	8	kind	man.	
Wal	k		- the	gs	rden	with	me.
Twe	nder	who .			– of	that.	

f. Observe and record the cases of finger pointing, vocalization, or lip movement. All of these are indications of immature habits which retard rate. Incidentally, notice which pupils cannot keep their minds on reading long enough to complete the assignment without wandering attention. Notice also which pupils make forward or lateral head movements while reading, instead of holding their books at a uniform distance.

Without informing the children of your purpose, observe them, carefully recording your observations on a prepared record sheet for future reference. Your record sheet should contain the names of all pupils arranged according to seating. Date your sheet and save it for comparison with a later dated record. Use code to record observations, for example:

P—pointing

H-head movement

L—lip movement V—vocalization W-wandering attention

E—signs of eye strain, as, for example, frowning, book held too close to eyes, eyes rubbed, etc.

Underline the code letter when you find the habit in marked degree.

Soon after the test, work for elimination of the habits, and re-test on a number of occasions. Do not announce your purpose on the re-test lest the pupil's responses differ from habitual reactions.

g. Test the span of recognition and discover which pupils need extra practice in phrase flashing to increase the span or number of words taken in at glance. Phrases of the same or increasing length are flashed or exposed for about one-half second. Teachers should try to keep the exposure time constant. The pupil tells or writes what he sees. (For occasional test purposes, a response in terms of word-calling or writing is permissible.)

The score on each phrase is the number of words seen at one flash. Errors in spelling should be noted for diagnostic purposes, but not counted on reading errors.

Another method of scoring can be used when pupils are tested individually. The same card is flashed repeatedly until recognized. The score on each card is the number of flashes required for it. In no case should the length of exposure be prolonged. The lengthened exposure defeats the purpose of the test. The vocabulary should

in all cases be within the experiences of the pupil. Training similar to that of the test may be based on phrase exercises related to reading matter. The test itself should not consist of related phrases.

h. Use silent reading tests in connection with much of the silent reading in which pupil groups or whole classes engage. If extensive reading is to be used as a means to the establishment of sound habits and a partial substitute for intensive instruction, there should be some guarantee that pupils are actually reading Systematic comprehension checks, based on material which pupils read silently, should be carefully prepared in advance. This throws the responsibility squarely upon each pupil and gives the teacher a basis for the selection of pupils who need special help and of pupils who are sufficiently able and reliable to proceed to larger reading responsibilities and opportunities. The systematic use of such informal tests is the best means of preventing the deterioration of good habits and the formation of bad habits which lead to serious deficiency.

The following examples of continuous checks on group or individual silent reading are selected from the Lincoln School Experimental Materials.

- I. "Cover the sentences that do not belong to the story (The Stone in the Road)."
  - Once there was a very poor man.
     Once there was a very rich man.
  - There was a road beside his house.
     There was a road behind his house.
     There was a road in front of his house.
  - He was sad to see idle persons.
     He was sad to see people ill.
  - He put a stone in the middle of the road.
     He put some stones beside the road.
  - 5. The stone was moved by a man with a cow. The stone was moved by a farmer. The stone was moved by the miller's boy. The stone was moved by the rich man's son.
  - Under the stone he found a piece of gold.
     Under the stone he found a pot of gold.
     Under the stone he found a pot of silver.
     (Winston II, pp. 61-64.)

(A marked copy of the test is used as a scoring form.)

# II. Mark the right endings.

# Robinson Crusos

(Chapters 20, 21, and 22)

One morning Robinson	
made fine candles from the tallow	and a major pair on the se
saw five canoes on the shore	
saw five campers on the beach	
He went to the hilltop and saw	
a great ship at anchor near-by	The same training finally
a great many canoes farther out	
a great many men on the shore	
One of them	
became his servant	the an early to the following the transfer and the
was an old friend of his	
was tied to a post	NULVI 14F 9179 NATIONAL
He found that	
they had come from England	t on only on a second
they had come from the mainland	other or nearly to represent
all the tribes were friendly	eta su number - retur - process processormente
Friday was	
a very stormy day	granus
the day after this trouble	- N - N - N - N - N - N - N - N - N - N
a young savage	
Friday had	
never been a lucky day	* • • • • • • • • • • • • • • • • • • •
never worn clothes before	er e sind que santa
Friday soon learned	
many things from his master	
that the big ship was wrecked	
Robinson told Friday	
to go back to his tribe	
how lonely he had been	Printer out of Printerland Printerlands
to stay in the corner	-
Friday trembled because	
he was afraid of a whipping	*****
he was afraid of Robinson	
he was afraid of lightning and thunder	-
Robinson told Friday	
that God was angry	
that God was a loving father	
to answer when he was called	

Things to do when you have marked all the right answers:

Copy the words that tell the truth:

Friday's skin was white, yellow, dark.

Friday slept in the castle, cave, tent.

Draw a picture to show what Robinson saw from the hilltop.

There follow illustrations of exercises used as 'chapter checks.' These are devised for Chapters II, VIII, IX, X, and XXIV of Bingham's Merry Animal Tales and Chapter II of Perkins' The Dutch Twins.

### Merry Animal Tales

# Chapter II

Read to find out:

- 1. Who decided to have the rat meeting?
- 2. What was it about?
- 3. What did they plan to do?
- 4. How did the meeting end?
- 5. Who carried out the plan?

# Chapter VIII

Star the correct answer:

- (a) Mrs. Blackrat had a way of saying "Yes" and never doing the thing she said she would do.
  - (b) Mrs. Blackrat had a way of saying "Don't" and "No" and then at last doing the very thing she said she would not do.
  - (c) Mrs. Blackrat had a way of saying "No" and never doing the thing she said she wouldn't do.
- 2. Blackie went on a visit

to the country

to the lion

to Madison Square

3. While the mistress was playing, Blackle sat

on the piano

in the corner

under the bookcase

4. Blackie was frightened by

the music

the rain

the slam of a door

<sup>&</sup>lt;sup>1</sup> Contributed by M. Taylor, Swarthmore, Pa.

5. He ran down into the cellar up the garret steps home

# Chapter IX

What	are the	missing	words	in the	sent	ences?			
1.	Father		- told	Blacki	e all	about to	aps.		
2.	When -	_	visited	the p	antry	, he saw	queer	little	

with an open \_\_\_\_ and the biggest, nicest piece of

- 3. Blackie went down the chimney of the little \_\_\_\_\_ and sure enough it was a ————.
  4. Little mistress ————opened the door and out skipped
- and up the \_\_\_\_\_ he went.

# Chap. X

Which statement is true?

- 1. To everything Blackie wanted to do, Mrs. Blackrat said yes don't please
- 2. Blackie ate his picnic dinner under the corn stalks under a rock on a rock
- 3. Mrs. Blackrat said: "You ate so much corn that

I am sorry."

I am ashamed."

I am cross."

# Chap. XXIV

Place a check mark after each statement which is true.

- 1. A fox can climb a tree.
- 2. It was well for Mr. Fox to hunt the turkeys in the moonlight.
- 3. A fox is afraid of a dog.
- 4. Foxes are never untruthful.

# The Dutch Twins

### Chap. II

Directions: Below each question place the correct answer. You will have three answers left over.

- 1. In what did Father Vedder carry his vegetables to market?
- 2. What crosses the fields of Holland like roadways?
- 3. What do the canals which flow through the town make?

- 4. What did the twins help their father do?
- 5. With what vegetables were the baskets filled?
- 6. When was the boat loaded for market?
- 7. What did Mother Vedder make for supper?
- 8. What tells you it was morning when they started for market?
- 9. What nodded to them from the canal bank?
- 10. Where did the stork have her nest?
- 11. Where did they see a woman washing her clothes?
- 12. What was the captain's boat like?
- 13. What is an open square with little booths and stalls about it called?
- 14. Where did Father Vedder carry his vegetables when he unloaded them from his boat?
- 15. What did Kit sell?
- 16. What did Kat sell?
- 17. What did the twins buy with the money which their father gave them?

The replies, which follow, should be spaced more widely on typed cards, cut apart and filed for repeated use if the teacher wishes to avoid uncontrolled written answers.

Boat
Water streets
Cabbages, onions, beets, and
carrots
Buttermilk porridge
The blossoms of the flax
flower
A floating house
To a booth or a stall
Ten onions
A wagon
Birds

Canals
Wash the vegetables and load the boat
Late in the afternoon
The grass was all shiny with dew
On the chimney
In the canal
Market place
A cabbage
St. Nicholas dolls

In a tree

# INFORMAL READING TESTS FOR THE INTERMEDIATE GRADES

During this period, informal tests should frequently require the grasp of longer units of meaning than the sentence or paragraph. Pupils should be asked to give brief oral or written reports or summaries of books which they read independently. On books of general interest, informal class tests may be planned to cover each chapter, a number of chapters, or the whole book. Rate tests may be combined with the reading of such books. Children who do poorly on these should be tested on such fundamental aspects of reading

ability as perception span, rate of oral reading, breadth of vocabulary, ability to recognize and differentiate words, rate of silent reading, phrasing (ability to break up paragraphs or sentences into proper meaningful groups), ability to follow directions, to reproduce content, and to answer questions upon material read. Both informal and standardized tests may be used for this purpose. Remedial work may be necessary for pupils who give evidences of deficiency in informal and standardized tests.

Because extensive silent reading of easy material is so conducive to the elimination of evidences of immature and faulty habits, and because the early part of this period is a transition point in which a variety of silent reading habits should begin to be formed, many informal tests should be used to make sure that pupils are comprehending adequately and to locate causes of reading difficulty. Checks on the quality of silent reading eliminate the formal oral recitation at this point, where oral reading should be used sparingly and only when there is a real motive and a genuine audience situation.

Suggestions follow for carrying out seven types of informal tests pertinent to this period.

- a. Test the ability to anticipate meaning. Pupils read part of a story. At a turning point in the plot they are asked to stop and write down possible endings. These are then checked with the real ending, in a group discussion. Or the teacher reads a story and stops at intervals to ask a question concerning portions of the story yet to come. The pupils write their answers.
- b. Test the ability to locate information. This test is given with books open. The pupils may respond by giving the three opening words of the paragraph in which the information is located, or by giving the page or paragraph reference. Thus the amount of copying and writing may be reduced. Or pupils may stand when they find the material on a given topic. When many of the pupils have located the material, the information may be worked into a blackboard outline before the next topic is assigned. Such tests, or exercises, are most valuable when based on subjects which pupils are studying at the time. The questions should be based upon a use of the index, appendix, table of contents, chapter headings, subtitles, illustrations, maps, tables, footnotes, and cross references. Teachers should al-

ways locate the information themselves while planning a test of this sort, so that they may realize the nature of the difficulties which the pupils are likely to encounter. The test may necessitate the use of more than one book. A simple assignment is:

Locate information on these topics:

- 1. Cotton-growing countries.
- 2. Cotton-growing states of our country.
- 8. Size of United States' cotton crop.
- 4. Size of world's cotton crop.
- 5. Insects which harm the cotton crop.
- 6. Places where long staple cotton grows.
- 7. Cotton-seed products.
- 8. Cotton ports.
- 9. Cotton mills.
- 10. Cotton produce.
- c. Test the ability to select the central thought or main idea in each of series of paragraphs.<sup>2</sup>
- 1. Read the following paragraph 3 and then draw a line under the two words which best describe what this paragraph is about:

pouring water heating stones boiling water making fire

There is an interesting way to make water boil for the cooking of food, which is in use among many savage tribes to-day. They fill a large jar with water. Stones are then heated in a fire and dropped into this jar. The heat which they give off makes the water boil and cooks the food.

2. Draw a line under the sentence which best tells what the whole paragraph is about:

No one takes better care of his dress than a bird. Every day, with most birds, it is washed and carefully dried. Each feather is passed through the bill and the whole is thoroughly shaken out. Besides washing and drying the feathers, birds need oil to keep them in good condition. We often see ducks oiling their feathers before a rain.

8. Read the paragraph and draw a line under the words which will best tell how to keep milk sweet:

take it on a trip to Italy boil it keep it in open bottle bottle it with great care mix it with water

<sup>&</sup>lt;sup>2</sup> See Second Yearbook of Department of Elementary-School Principale; N. E. A. Illustrations by Elda Merton, pp. 348-9.

<sup>&</sup>lt;sup>3</sup> This and the following five paragraphs were prepared by Dorothy Van Alstyne, Teachers College, New York City.

- A Boston doctor started from home several years ago for a trip to Italy. He took with him several dozen bottles of milk and opened one every day for three weeks. The last bottle opened in Italy was as sweet as the first. The reason was that bacteria in the air could not get to the milk. Nothing was done to the milk except to bottle it with great care.
- 4. Read the paragraph and then draw a line under the words which best tell what the paragraph is about:

Milk is a valuable food Milk is good for children

Milk contains fat

Milk is not good for adults

Milk is often called the perfect food because it contains all the things needed by the body. One can live for a long time on milk alone. This is not true of any other food. It is a valuable food for all persons, and one of the best we have in sickness; but it is not good as the only food for healthy adults or for school children.

5. Read the paragraph. Then draw a line under the word which tells how the little dog felt:

> afraid lonely happy WOALY

The dog ran up to greet a man as he came up the path. He wagged his tail joyously and barked in short excited barks. The man leaned down and patted the dog on the head. Then he rolled up the paper that was under his arm and gave it to him. The dog ran with it up the path toward the house, his tail wagging all the time.

6. Read the paragraph. Draw a line under the words which best tell where you would keep a growing plant in winter:

under the trees

in some water

in a temperature below 42 degrees

in a temperature above 42 degrees

All plants stop growing when the temperature falls below 42 degrees. They begin again whenever the temperature rises above 42 degrees. If, in any way, we could in the winter raise the temperature above 42 degrees for a week or two, the buds on the trees would begin to swell, the seeds would sprout and the leaves might unfold.

- d. Test ability to organize a paragraph by supplying a topical heading and outlining the supporting details.4
- e. Test the ability to recognize equivalent ideas when expressed in altered form or changed wording, or to detect different ideas with like wording. A test of this sort selects pupils who do not assimilate ideas, but merely try to take them in verbatim. It should be based on content material like that which children use in study periods.

<sup>4</sup> For illustrations see Elda Merton and Ernest Horn, Second Yearbook, Dept. of Elementary-School Principals, N. E. A., p. 859.

1. Test the richness of a pupil's vocabulary of meanings and his ability to distinguish shades of meaning.

### Illustrations:

- 1. Write words which describe a circus parade, an accident.
- 2. Write never at the top of your paper. Write always at the bottom. What words would you put between the always and never? Make a ladder of words which leads from always to never. You may have two minutes to do this.
- 8. Write phrases which fit between the following extremes. See how many you can write.

exceedingly small unusually early somewhat surprised exceptionally large extremely late simply astounded

4. Write opposites for the following phrases.

kind and obliging—
exceedingly fortunate—
absolutely harmless—
in festive attire—
without fear—

- 5. Make phrases that mean about the same as those in 4 above, but use different words,
- g. Discover the level of attention at which pupils are working and raise the level of attention. Give an assignment and let children work for a given time. Collect papers. Tell them that you wonder whether they can do better. Tell them to try the same task again and say that, if the second set of papers is very much better than the first as a whole, they may have a certain privilege. Give the same time limit and note improved quality of work and improved attention. Give no help during the test. Report to pupils as soon after such a test as possible and keep faith with them. Suggest that those who made greatest improvement work at that level of attention more often, but commend those who did well on the first trial.

# INFORMAL TESTS OF SPECIFIC READING HABITS OF THE WORK TYPE

A great deal of the purely recreational reading may well be done independently and at home; the time for reading may then be reduced and informal tests may be used to develop effective study technique and procedures with the informational material of other school subjects. Where departmental organization is maintained, such work should be done in co-operation with special teachers.

a. Test ability to read arithmetic problem material and give significant words due consideration. Illustrative material follows that has been prepared by Miss Clara Wills, Gallatin, Missouri.

### General directions

- 1. Have as many pairs of exercises as there are pupils in the class.
- 2. Give each pupil one pair with the following instructions either on a paper or written on board.
  - a. Have sheet of paper ready.
  - b. Place name on paper.
  - c. Read the problems through.
  - d. State clearly in a sentence each difference you find between the problems.
  - e. Number your answer to match the paper.
- 3. Have pupils exchange problem slips and work another pair of exercises.
- 4. Have pupils work in pairs, compare, and read exercises again for verification.

I

- 1. Grace promised to pick 30 quarts of blueberries for her mother. She has picked 181/2 quarts. How many more quarts must she pick?
- 2. Grace promised to pick 30 quarts of blueberries for her mother. She has 18½ quarts more to pick. How many has she picked?

11

- 1. If a gallon of paint is enough for 160 square feet, how many gallons will be required to paint both sides of a board fence 4 feet high and 260 feet long?
- 2. If a gallon of paint is enough for 160 square feet, how many gallons will be required to paint one side of a fence 4 feet high and 260 feet long?

# III

- 1. Helen promised to read a book of 150 pages on gardening. She has read 45 pages. How long will it take her to read the rest if she reads fifteen pages an hour?
- 2. Helen promised to read a book of 150 pages on gardening. She has 105 pages more to read. How long has she read if she reads 15 pages an hour?

### IV

- 1. George has \$50 in the savings bank. The bank pays him 4% a year for the use of his money. How much does he get a year for the use of his money?
- 2. George has \$50 in the savings bank. The bank pays him 4% a year for the use of his money. How much does he get in three years for the use of his money?
- b. Check comprehension of maps and related reading matter. An exercise based on the use of an outline map of New York and another based on the use of an outline map of South America will afford illustrations.

The teacher gives each pupil an outline map of New York State. Brigham's From Trail to Railway, ch. V, is available for reference. Blackboard directions are as follows:

1

- 1. Put in names of two lakes.
- 2. Show the Hudson River by a line.
- 3. Put in Clinton's Ditch, using dash-dot line.
- 4. Put a "dot" and letter "G" for the city that is the gateway to the east and west.
- Put in a star to show where the city is from which Clinton's first train started.
- Draw a line from the star showing which way the train went and about how far.
- 7. Put in initial of city at end of that line.
- 8. Draw a line with a dot at each end showing another railroad which was built near Clinton's Ditch later.
- 9. Draw in a heavy line where the New York Central now runs.
- Show with the letter "W" and a dot where Washington's headquarters were during the Revolutionary War.
- 11. Show what the New York Central did when they found they needed more tracks and found there wasn't any room beside their tracks along the Hudson.

After the children finish this work, the teacher tells them that if they are satisfied with their papers they may hand them in. If not, they may make another effort, using their books. The first trial receives double credit, while the second receives half as much. This is an incentive to do the thing right the first time. The children who make a second paper are asked to write a big "two" at the top of the second paper and hand in both papers.

### II B

Carpenter's South America, Ch. 22, is given for silent reading in class. At the end of six minutes, pupils are asked to mark the place where they stopped reading.

Outline maps of South America, with the boundary of Argentina and neighboring countries indicated, are then given the children with the accompanying directions:

- Write the name of the country we are visiting on the line under the map.
- Draw a circle around the part of Argentina we will pass through first.
- 3. Put a large S where you will find sugar cane growing.
- 4. Put a D where the land is almost a desert.
- 5. Put a W where wheat is grown.
- Write the word, Andes, where you would expect to see these mountains.
- I)raw an arrow to show in which part of Argentina her immigrants would arrive.
- Draw a line showing our trip from our starting point to our stop to visit the Welsh shepherds.
- 9. Draw a line under the name of the chief port on the Atlantic
- 10. Put a star (\*) where Buenos Aires is located.
- Draw a double line to show the completed part of the railroad through Patagonia and a single line to show how this road will finally be extended.
- d. Detect careless readers and show them the need for careful reading of informational material. The following material, contributed by W. J. Osburn, is intended for use with high-school classes.

### Great Britain

During the nineteenth century Great Britain did not experience any of the sudden revolutions which appeared in nearly every other country of Europe. For centuries, England, Scotland, and Ireland had possessed representative institutions. When reforms were needed, they were adopted gradually, by the natural process of law making, instead of resulting from rebellion and revolt. In this way Great Britain had been changed from an aristocratic government to one founded on democratic principles. By 1884 the suffrage was nearly as extensive as in the United States. Parliament became as truly representative of the people's will as our American Congress. Far-reaching social reforms were adopted which advanced the general welfare.

Prepared by Marene W. Snow.

Great Britain was the first nation to experience the advantages and disadvantages of the new age of coal and iron, and the new methods of factory production. Her wealth and commerce grew at a rapid rate, and she invested her profits in enterprises in many parts of the world. The factory system drew so many workers from the farms that Great Britain no longer raised sufficient food for her population. She became dependent upon the United States, Australia, South America, and other lands for wheat, meat, and other necessaries of life. Her merchant vessels were to be found in all parts of the world; and her navy was increased from year to year to protect her commerce and colonies. From now on it be-

	Questions	
1 Did Great Brita	•	dden revolution during the
19th century?	in experience any na-	
Yes	No	Didn't say
2. Was most of Eur	rope at war during thi	s century?
Yes	No	Didn't say
3. Were reforms ad	opted slowly in Irelan	d at this time?
Yes	No	Didn't say
4. Was the United	States at war during	this period?
Yes	No	Didn't say
	g social reforms adopt	
Yes	No	Didn't say
•	e of coal and iron enti	rely advantageous to Great
Britain?	.,	<b>7</b>
Yes	No	Didn't say
	in now able to pay all	
Yes	No	Didn't say
s. Did Great Brita period?	in raise sumcient 1000	i for her people after this
Yes	No	Didn't say
	epend upon her factori	•
Yes	No	Didn't say
	hat an enemy might st	arve Great Britain into sub-
mission?		
Yes	No	Didn't say

or "no," or "didn't say," and ask them to draw a line under the answer

which seems to them to be the correct one. It is intended that the pupils shall answer the questions with their books open. They may read the selection over again if necessary in order to decide on the correct answer.

### THE ADVANTAGES OF INFORMAL TESTS

There are numerous advantages to be derived from the frequent use of informal or unstandardized tests. These advantages are such that the informal tests serve certain purposes which standardized tests cannot serve.

Informal comprehension tests are useful as an index and a guarantee of mental activity on the part of all pupils during silent worktype reading. When carefully planned and based on current class readings, they enable the teacher to ascertain quickly which points are clear and which ones need clarification by group discussion, explanation, vocabulary work, or re-reading. Their use is conducive to the formation of habits of thoughtful reading.

By study of the results of such tests teacher and pupil become aware of the nature of specific difficulties. Thus, informal tests furnish data which are of use in the organization of flexible groups for training lessons to meet individual differences for which provision must be made. They also make it possible to chart measurements taken at brief intervals to show pupils their own progress. Such graphic records are a stimulus to effort and supply an objective basis for school marks.

By the use of informal tests it is possible to hold all pupils accountable for the comprehension of assigned readings without necessitating the uneconomical expenditure of time for oral questioning. The volunteer responses received always allow some pupils to evade responsibility in part or entirely.

If each informal test is framed in the light of the objectives or purposes which determined the reading, teachers may ascertain to what extent the objectives of assigned study were attained. They may also judge the significance or fairness of their assignments and the comparative difficulty of subject matter. There is every reason to believe that some tests are in themselves valuable reading and learning experiences. By their use much time otherwise devoted to formal training or recitation may be legitimately saved for real socialized experiences in extensive reading or other worthwhile activities.

Informal tests permit greater freedom in the choice of reading matter. If tests or checks are at hand, it is not necessary for all pupils to read the same thing. Each can be tested on what he has read.

Numerous informal tests may be arranged to cover a wide range of objectives. Teachers may thus be led to test for some of the significant aims and values not included in standardized reading tests. It should be noted that the prime purpose of informal tests is emphatically not to prepare or coach children for standardized tests. This statement is made because of the erroneous notion that standardized tests are formidable and that it is legitimate to prepare for them as for old type examinations. When used after such preparatory coaching, comparison with norms obviously loses all significance.

### CRITERIA THAT INFORMAL TESTS SHOULD SATISFY

- 1. It is absolutely essential that informal tests be more than silent reading devices. They should be carefully planned with reference to a broad range of aims and objectives, because the types of tests and responses required condition the character of the pupil's mental activity and quality of attention. Informal tests should be varied enough to guard against narrow aims or the over-emphasis of certain types of reading experiences at the expense of others.
- 2. Informal tests should, whenever possible, be based on significant, worthwhile reading matter. Tests based on unrelated sentences, and containing irrelevant and arbitrary directions, are not suitable vehicles of instruction. The effects of training based on such exercises are not so likely to spread or transfer that they warrant great expenditures of time or effort. It is far more economical to base informal tests on what children read, than to frame paragraphs or set up sentences in order to base tests or questions upon them.
- 8. The technique of informal tests should be simple and easily explained to pupils. Whenever possible, the technique should be self-explanatory, in order that there be the least possible expenditure of time in explanation of procedure and that there be the least possible liability of confusing the pupils. The responses should be well within the maturity and abilities of the pupils and should not

necessitate undue effort or time either on their part or that of the teacher.

- 4. Whenever possible, the test itself should be a learning experience in which every pupil is thrown on his own responsibility.
- 5. The scoring should be so objective that the pupil realizes the fairness of the test and can almost always score his own work or that of other pupils by reference to a key.
- 6. The pupil should be made aware of the purpose of each test, of the significance of his success or failure, and in the latter case, of some means of improving his powers.
- 7. Success in tests should give pupils satisfaction and be rewarded by other reading privileges and responsibilities.
- 8. Tests should be framed and conducted to avoid temptations to copy, to guess, or to resort to other irrelevant cues.
- 9. The nature of each test should be adapted to the reading matter on which it is based. Questions of fact and analysis are inappropriately used with literary material. Where appreciation is the desired end, such tests are not in place. Comprehension of sequence, of plot, or of total meaning cannot be tested or developed by means of questions that dwell on insignificant detail. Thus, tests must ascertain whether pupils are reading with the mind-set appropriate to the specific material.

# TEACHERS MAY PROFITABLY CONDUCT AND USE INFORMAL TESTS

From the criteria just listed and the illustrations which appear in this chapter, teachers who wish to construct informal tests may see what types of response and reactions are economical and appropriate. Adaptations of these techniques and procedures to other materials will serve the same purpose only when that purpose is clearly grasped and embodied in the adaptation. The illustrations also show that tests may be so made that scoring is easy and rapid. In many cases pupils profit by exchanging papers or scoring their own work under supervision. Scoring forms or answer sheets should be filed for future use.

Periodic informal tests need not increase the burden of instruction. On the contrary, experiment shows that they actually simplify the teacher's problem and increase the effectiveness of instruction

See Chapter IV.

in a way which saves time, otherwise spent in recitation, for the unhampered enjoyment of extensive reading, dramatic expression, real discussion, and audience reading. In order to function in this way, informal tests must be an organic and vital part of the reading program.

Certain types of informal reading tests are now purchasable. Some of the newer reading books contain informal tests on content material, or checks on comprehension.

A progressive reading program is so broad and its aims are so diverse in nature, that attainment must be studied with reference to numerous specific objectives. Only thus can individual and group needs be revealed and served effectively. Constant study of pupil progress is the essential function of the teacher. A regular checking on a well selected range of objectives would do much to reduce overemphasis on narrow aims or the uncritical adoption of ready-made 'methods' or 'devices.' Undue use of devices unrelated to sound aims and principles of procedure too often results in superficial work and reduced learning values. Variations in test procedure have been presented purposely to show how some purposes may be served in more than one way and to emphasize the subordination of the means to the end, and the subordination of testing to sound and inclusive aims. The informal tests in this report have been selected for their illustrative value. They must be studied, not as models, but as suggestions for constructive work along similar lines. The teacher will find further help in the references cited at the end of this chapter.

### B. STANDARDIZED READING TESTS

Those who are seriously concerned with the improvement of instruction in reading cannot fail to realize the need for some tests or measures by means of which the reading abilities of pupils in particular situations can be compared with those of unselected groups. When such comparisons are to be made, it is essential that the tests or measures be so prepared that they may be given later and elsewhere under identical conditions and scored in exactly the same manner. The process by means of which tests are made acceptable for such use is called standardization. The process of standardization reduces to a minimum those factors which would

make comparisons unfair or unreliable. Teachers and lay critics sometimes do not realize the necessity of holding to standardized directions for giving and scoring the tests and therefore take liberties with procedures which they consider unnecessarily didactic or otherwise poorly adapted to given situations. Even when made with the best intent, such variations vitiate the value of comparisons and invalidate conclusions based on the test results.

Teachers and pupils should come to think of standardized tests as impersonally as one thinks of measurements of height. Administrators can do much to foster this attitude and are perhaps somewhat responsible for the attitude of anxiety which causes teachers and pupils to react unfavorably to tests. The interpretation of standard test results requires not only tact, but also insight into the limitations of a single measurement. Neither the pupils' progress nor the teacher's efficiency can be fairly judged by one test unsupported by other data. Furthermore, many of the significant outcomes of instruction are not measured by existing tests. Supervision which depends too largely on test results, skews teachers to an over-emphasis on the narrow range of objectives represented in the tests. Nevertheless, when properly used, interpreted and supplemented with other information, standard tests are exceedingly valuable.

### BASES OF TEST SELECTION

Other things being equal, cost may well be the determining factor in the selection of reading tests. But other things are seldom equal and value is not always highly correlated with actual cost. The following factors should be considered in the selection of standardized reading tests:

- 1. The test should be a valid measure of some significant type or aspect of reading ability.
- 2. If a test measures only one aspect or type of reading ability, it should be supplemented with another reading test which measures another aspect.
- 3. The test should be available in at least two so-called equivalent forms, in order that re-tests may be given at appropriate intervals without reducing their significance by practice effect.
  - 4. The reliability of the test and the derivation of norms should

be considered. These are usually reported in the manual of directions.

- 5. The norms should be sufficiently precise to be of value in interpreting individual scores and should be stated in a form which permits comparison with other reading tests, subject tests, and measurements of pupil capacities.
- 6. The standardized directions for giving and scoring the test should be definite, easy to follow, and economical of time and effort.

# CARRYING OUT A TESTING PROGRAM

In giving standardized reading tests the following considerations should be taken into account:

- 1. Teachers should be informed of the proposed testing program and of the conditions upon which its success depends.
  - 2. Standardized directions should be followed in detail.
- 3. If the tests are given twice a year, in October and May, the attitude and work of teachers is improved. The teacher who has a class which scores low in October, has an opportunity to show her effectiveness by the growth record rather than by the test scores themselves.
- 4. A testing program should be followed by a report to pupils and teachers.
- 5. When test results have been reported, teachers and pupils should receive practical help and suggestions by means of which improvement may be secured.
- Problem cases should be studied by means of additional tests, diagnosis, and remedial work.
- 7. The test scores should be considered in reorganizing the classes and forming flexible groups for reading purposes.
- 8. Other factors not measured in standardized tests should not be neglected in a sound and inclusive teaching program and in the evaluation of results. Literary appreciation, dramatization, and love of reading are not so easily measured, but are nevertheless significant. Standardized tests do not pretend to be inclusive measures of all reading values.
- Children of low intelligence cannot be expected to do as well as brighter children. Similarly, children with language handicaps

are often retarded in reading. Intelligence data and other pertinent facts are essential for the valid interpretation of test results.

- 10. Available norms are based on the average results of prevailing practice, and it is quite possible that such norms will move upward as revised aims, scientific methods, and appropriate materials make themselves felt.
- 11. Because norms are merely measures of the average achievement of unselected groups, they should be used as reference points rather than as aims or standards.

### A CHART OF STANDARD READING TESTS

For ready reference there has been brought together in chart form information concerning the principal standardized reading tests. The chart shows for each test (1) the name of the test and its compiler, (2) the name and address of its publisher, (3) the grades for which it is designed, (4) the number of forms available, (5) the general nature of the test, (6) the kind of norms supplied, and (7) the method by which the results are interpreted.

<sup>&</sup>lt;sup>7</sup> Some of the earlier tests are omitted, but the reader will find descriptions of them in the *Eighteenth Yearbook* of this Society, Part II, pp. 45-49.

Furthermore, for certain experimental and diagnostic purposes other tests will be found useful. Among these may be mentioned: Gates' Word Pronunciation Test (Teachers College, Columbia University); Holley's Sentence Vocabulary Test (University of Illinois); Pressey's Attainment Tests—reading (Indiana University); Thorndike's Visual Vocabulary Test (Teachers College, Columbia University); Woody's Silent Reading Test (University of Michigan).

# TABLE OF STANDARD READING TESTS

Brief Description Norms Scoring	Group test of silent reading consisting of 20 norms. paragraphs correctly approximately equivation of any grade.  Solution of a correctly approximately equivation of a correctly marked in 5 minutes is a corespictation by a core point of any grade.  Grade No scoring form. No. of any grade.	Group test of silent Norms Pupil scores 1 for reading consisting of 30 for 10 every paragraph corapproximately equiva-levels of rectly marked during about 30 words each ment in are easily scored. Very Response by crossing each carefully standardized out one word which grade.	Group test of silent Grade No. of words read per reading. Yields separate of rate, rate measure of rate, accuracy, and compresend compression part II, questions on paragraphs of narrative. Response by writting yes or no. Compresent in gase or no. Compr
Forms	Four ref.	Two Grouread appring a ppring	Three Co.
Range of Grades	ш-лш	и-ми	11-VI
Publisher	Russell Sage Foun- dation, 130 E. 22nd St., New York, N. Y.	Lippincott, Philadel- phia, Pa.	S. A. Cour- tis, Detroit, Mich.
Title and Compiler   Publisher   Bange   Of	Ayres-Burgess Picture Scale (May Ayres Burgess)	Chapman-Cook Speed of Reading Cross-Out Test (J. Crosby Chap- man, S. Cook)	Courtis Silent Reading Test (S. A. Courtis)

Detroit Group Test in Word Recogni- tion (Elias Oglesby)	World Book Co., Yonkers- on-Hudson, N. Y.	<b>H</b>	Ten	Group test consisting of 40 elements of increasing difficulty—words and simple phrases placed between columns of pictures. Response by drawing a line connecting the element with the appropriate picture. Fore-exercise.	Class scores on a thou- sand point basis.	Score is number correctly marked in 4 minutes. Test for higher grades in preparation.
Gray Standardized Reading Para- graphs and Oral Reading Check Test (W. S. Gray)	Public School Publishing Co., Blooming- ton, III.	II.Set I; II and III.Set II; IV and V.Set III; VI to VIII.Set	Five Five	Individual tests of oral reading. Progress in rate and accuracy may be measured at intervals of one or two months.	Grade norms.	An analysis of the actual errors of each pupil is facilitated by the method of scoring and tabulating results.
Haggerty Reading Examination Sigma I (M. E. Haggerty and M. E. Noonan)	World Book Co., Yonkers- on-Hudson, N. Y.	# \$ #	Опе	Group test consisting of two parts, each preceded by a fore-exercise. Part I is a directions test of 25 elements of increasing length and difficulty. Pupils respond by putting appropriate marks on pictures and words. Part II contains brief questions to be answered by underlining yes or no. Only in the latter part is there an indirect measure of race.	Grade and age norms.	Grade Scoring forms providand age ed. Results of two tests norms. may be totaled or interpreted separately.

# TABLE OF STANDARD READING TESTS (Continued)

Scoring	Each part of the test is scored separately by means of a scoring key. The test yields only indirect measures of rate.	Tables are used for translating raw point scores into age scores or achievement ages.	Careful selection of ele- ments and standardiza- tion of tests makes
Norma	Grade norms	Point scores. Reading achievem e n t ages; comprehension and rate norms given sepa-rately.	Age norms with
Brief Description	Group test of silent reading. Consists of three parts: a vocabulary test of 50 graded elements; a paragraph reading test of 40 elements; a paragraph reading test of 27 items, based on 7 paragraphs of increasing difficulty. Each part h as a fore-exercise. These tests employ various forms of the multiple choice and true-false techniques.	and VI each reading yielding measto VIII to VIII test ures of rate and comprehension. Has foreexercise. The 16 elements are stanzas or paragraphs followed by directions or questions to be answered by underlining 1 of 5 words. Time allowed, 4 minutes.	A and B Group test consisting of three parts which together cover the
Forms :	Ļ	each test	A and B
Range of Grades	3 3	V of III of VI	II to VIII
Publisher	World Book Co., Tonkerr- N. Y.	Public School Coulishing Blooming- ton, III.	World Book Co., Yonkers-
Title and Compiler Publisher Range of Ordes	Haggerty Beading Examination, Sigma III (M. E. and L. C. Haggerty)	Monroe's Standard- ised Silent Reading Tests I and II (W. S. Monroe)	Stanford Achieve- ment Test: Reading Examination

(T. L. Kelley, G. M.   on-Hudson, Ruch and L. M.   N. Y. Terman)	on-Hudson, N. Y.			three main factors in- volved in getting mean.  ing from the printed for each pretation of perform- page: 1. Paragraph sepa- meaning; 2. Sentence of individuals or  meaning; 3. Word  meaning; 3. Word  meaning; 3. Word  incommethed, yes-no,  com- underlining, and multi- ple choice. Each part  from method, yes-no,  were systematically  were systematically  insted to  ated. Highest reliabil- ity on record for group  test. Gross time allow- test. Gross time allow- ance for prim ary  aver- grades, 33 minutes; for  distri- utes.	P. E. of scores for each rately or three parts combined. Grade averages and districts act month of test. Age averages and districturant.	comparisons with Binet mental age and interpretation of performance of individuals or classes exceedingly significant. Scoring keys, age tables, and record blanks provided.
Stone Series of I.arrative Reading Tests (C. R. Stone, A. Bushrmann, and L. Murphy)	Public School Publishing Co., Blooming- ton, III.	N XI	0 ре	A series of 3 group tests in booklet form. Each contains fore-exercise and tests on two on narratives for Grades III and VIII respectively. Comprehension acore is based on replies to 20 multiple choice questions made on neparate sheets, thus booklet become permanent test equipment. Also yields measure of rate in words per minute.	Grade norms.	Unique timing device, scoring scheme, and distribution chart make for ready interpretation of results.

# TABLE OF STANDARD READING TESTS (Continued)

Scorting	T-scores 0-100. 50 T equals mid-point in distribution of unselected 12-year-olds. I point equals .1 sigma. Interpretation is facilitated by tables.
Norme	terms f T. core. ade rms half
Title and Compiler   Publisher   Range   Forms   Brief Description   Norms of Grades	Group test of silent reading. Consists of no paragraphs of increas- in ing length and difficulty. Employs constrolled answers to graduestions. Power test no involving no measure by involving no measure by case.
Forms	Ten
Range of Grades	XIIX
Publisher	Thorndike-McCall Teachers Reading Scale for College, the Comprehension Columbia of Sentences University, (Wm. A. McCall) New York.

### REFERENCES ON STANDARD TESTS 8

Those who are particularly interested in critical or comparative studies of tests and test construction or related aspects of investigations in reading will find in the following references much specific matter on such problems:

- Gates, A. I. "Experimental and statistical study of reading and reading tests." Journal of Educational Psychology, 12 (September, October, November, 1921), 303-314, 378-391, 445-464.
- Gates, A. I. The Psychology of Reading and Spelling. Columbia University Contributions to Education, No. 129, New York; Teachers College, 1922, Pp. vii, 108
- Gray, C. T. Deficiencies in Reading Ability. New York: D. C. Heath and Co., 1922. Pp. xiv, 420
- Gray, C. T. Types of Reading Ability Exhibited Through Tests and Laboratory Exercises. Supplementary Educational Monographs, No. 5. Chicago: University of Chicago Press, 1917. i-65, 172-192.
- McCall, Wm. A. "A proposed uniform method of scale construction." Teachers College Record, 22 (Jan., 1921), 31-52.
- Monroe, W. S. A Critical Study of Certain Silent Reading Tests.
  University of Illinois Bulletin, XIX, No. 22, 1922. Urbana, Ill.
  University of Illinois.
- Wyman, J. B., and Wendle, Miriam. "What is reading ability?" Journal of Educational Psychology, 12 (December, 1921), 518-531.

### REFERENCES ON INFORMAL TESTS

- Beauchamp, W. L. A Preliminary Experimental Study of Technique in the Mastery of Subject Matter in Science. Supplementary Educational Monograph, No. 24. Chicago. Department of Education, University of Chicago, 1923. Pp. 47-87.
- Educational Bulletin, No. 2, Minneapolis Public Schools, Minneapolis, Minn., 1923.
- Gray, W. S. "The value of informal tests of reading accomplishment."

  Journal of Educational Research, 1 (Jan., 1920), 103-111.
- Greene, H. A. "Measuring comprehension of content material." Twentieth Yearbook of this Society, Part II, pp. 114-127. Bloomington: Public School Publishing Co., 1921.
- Heller, Regina R., and Courtis, S. A. "Exercises developed at Detroit for making reading function." Twentieth Yearbook of this Society, Part II, pp. 153-162. Bloomington: Public School Publishing Co., 1921.

<sup>\*</sup>For an extensive and valuable bibliography on standardized tests and their use, see Bibliography of Educational and Psychological Tests and Measurements (Bulletin, 1923, No. 55, U. S. Bureau of Education), compiled by Margaret Doherty and Josephine McLatchy, under the direction of B. R. Buckingham. Consult pp. 76-90 and elsewhere for references on reading.—Editor.

- Horn, E., and Shields, C. Flash Phrasing Materials. Boston: Ginn & Co., 1923.
- Lyman, R. L. "Teaching assimilative reading." School Review, 28 (October, 1920), 600-610.
- Monroe, W. S. Written Examinations and Their Improvement. University of Illinois Bulletin, XX, No. 7, 1922. Urbana, Ill.: The University of Illinois, 1-72.
- Monroe, W. S., and Carter, R. E. The Use of Different Types of Thought Questions and Their Relative Difficulty for Students. University of Illinois Bulletin, XX, No. 34, 1923, 1-25.
- Parker, S. C. Types of Elementary Teaching and Learning. Boston: Ginn and Co., 1923. Pp. 352-356.
- Pressey, L. Tests to Accompany Supplementary Reading Materials.

  Bloomington: Public School Publishing Co.
- Rhodes, E. N. "The technique of silent reading." Elementary School Journal, 22 (December, 1922), 296-302.
- Ruch, G. M. Improvement of the Written Examination. Chicago: Scott Foresman, 1925. Chs. H, IV, V.
- Smith, N. B. "An experiment to determine the effectiveness of practice tests in teaching beginning reading." Journal of Educational Research, 7 (March, 1923), 213-228.
- Stone, C. R. Silent and Oral Reading. Boston: Ginn and Co., 1923.
  Pp. 241, 253-266.
- Zirbes, L., Keelor, K., and Miner, P. Continuous Checks to Accompany Extensive Reading Materials in the Primary Grades. Mimeographed Bulletin, The Lincoln School of Teachers College, New York, N. Y., 1924.

# CHAPTER X

# DIAGNOSIS AND REMEDIAL WORK

Current misconceptions. There are several conceptions of diagnosis and remedial work in reading, and because of current misconceptions and confusions regarding it, these are enumerated.

- 1. Some workers and writers have considered the problem from the standpoint of survey results. Standardized reading tests are given to all the children of a school system. Papers are scored and results tabulated. Conclusions as to reading status are drawn from a study of scores and tabulations. If certain schools rank low in comprehension or rate according to medians or other measures of central tendency, the findings of the test may lead to a campaign which has as its objective the general improvement of rate of comprehension in a whole system or in the schools or classes which made poor showings in survey tests. This procedure has distinct limitations. It assumes that the first step is a complete program. It assumes that "booster" campaign methods are legitimate substitutes for programs which proceed from an analysis of the situation and direct efforts to discover and remove causes of difficulty.
- 2. Expositors of a second conception of diagnosis and remedial work use standardized reading tests in another way. The actual responses of pupils are analyzed and tabulated. Some inquiry is made into the nature of the difficulty which causes failure on sach specific question. Corrective practice is suggested to teachers and pupils on the basis of such test data, but no other factors are taken into account. Classes are sometimes divided into groups with supposedly similar needs for remedial work.

Few standardized tests, however, are suitable instruments for diagnostic analysis. Even the Gray Oral Test, which is the most analytical of this group (standardized reading tests) cannot be used as a complete source of data for diagnostic and remedial work. Measures of "general reading ability" are not primarily diagnostic instruments and were never intended to be so used.

3. A third position is taken by those who avail themselves of standardized group and individual reading tests, but supplement such case data with information on educational history, intelligence, nationality, reading habits, extent of reading experience, physical condition, attitudes, and class work. Diagnostic inferences are drawn from careful analysis and interpretation of all available data. Remedial work is based on the writings of experimental workers who have reported on their procedure with similar cases

4. Some practical workers contend that diagnosis is a laboratory affair and that remedial work is out of the question in typical school situations. This extreme position cannot be maintained in view of published reports of successful remedial work accomplished under typical school conditions.<sup>1</sup>

There is, of course, room and need for more refined laboratory procedures, cumulative records of case studies, and careful analysis of the complex of traits and abilities which contribute to success or failure in reading and we must look to such work for the further validation of new procedures and a basis for generalizations on diagnosis and remedial work. But this is primarily the function and responsibility of investigators and research workers.

# PRACTICAL SUGGESTIONS

The objective of remedial work is removal of deficiency and, while a broadside attack on the total situation may raise the level of attainment in a school system, it does least for those who are most in need and thus misses its real point and purpose. There must be some analysis into the particular causes of deficiency if remedial work is to be highly effective.

It is the purpose of this chapter to bring together suggestions from reported studies in a form which will facilitate ready reference and encourage teachers to make a systematic attack on the problem cases in their own classes. The proposals in this report are, therefore, purposely limited to plans which are practicable under classroom conditions.

<sup>&</sup>lt;sup>1</sup> Geiger, R. "A study in reading diagnosis," Journal of Educational Research, 8 (November, 1923), pp. 283-390

Research, 8 (November, 1923), pp. 283-300.

Waldman, Bessie L. "Definite improvement in reading ability in a fourth-grade class." Elementary School Journal, 21 (December, 1920), pp. 273-280.

Zirbes, Laura. "Diagnostic measurements as a basis for procedure." Elementary School Journal, 18 (March, 1918), pp. 505-512.

# Steps Which Characterize Well Conceived Work with Remedial Cases in Classrooms

- 1. Discovery of deficiency in the course of classroom activities.
- More intensive observation and study of the exact nature of difficulties encountered in regular class work.
- 3. Individual examination by means of personal interview and selected standardized and informal tests with a view to revealing fundamental attitudes and causes of deficiency.
- 4. Formulation of specific remedial measures which attack the cause of deficiency.
- 5. Initiation of regular remedial work in a manner to enlist pupil co-operation and effort.
- 6. Measurement with records, notes on pupil reactions, and study of progress.
- 7. Adjustment of work to changing needs until deficiency is removed.

# A Chart for Guidance in Diagnostic and Remedial Work

To facilitate these steps, the following chart, or tabular analysis, is provided. The items were gathered from published and unpublished case records and diagnostic studies listed at the end of the chapter. Successful remedial work depends on accurate diagnosis and well organized remedial work suited to specific needs. The remedial suggestions here made have all been found effective with one or more cases. Almost all of them were formulated for experimental purposes. Their general validity is still to be determined by experiments in which they are given wider application. With such reservations the chart is submitted for use in practical situations where access to sources is not feasible.

How to use the chart. When in search for ways and means for dealing with a given remedial case, look down the Column I, headed "Evidences of Deficiency," for items which apply to the case in question. Then read across the summary to get diagnostic inferences (Column II) and specific remedial suggestions (Column III). Then formulate practice materials in line with the particular proposals in Column III. When cases exhibit a combination of deficiencies, attack fundamental difficulties first or combine remedial suggestions into a working plan. When a number of children have similar difficulties, plan the remedial practice as group work.

# TABULAR ANALYSIS OF SUGGESTIONS ON DIAGNOSIS AND REMEDIAL WORK:

# A Chart for Classroom Use (Directions for the use of this chart are on the preceding page.)

Evidences of Deficiency	Diagnosis	Remedial Suggestions
Lack of Pinency and Facility	Actual reading difficulty which points to need of well directed instruction.	Give much practice with comparatively easy material. Make pupil conscious of value of sight vocabulary.
Frequent halts and hesitations dur- / ing oral reading.	Low stock of sight words.	Provide incentive for accumulating a stock of sight words.
Periods of confusion during oral reading.	Little or no power of word analysis. Material is beyond pupil's ability.	Provide vocabulary training in drill period. Keep records of growth on timed tests, with lists of common words and words asked for while reading.
Numerous requests for help on simple and common words in oral or silent reading.	Failure to accumulate sight vocabulary as a by-product of reading experiences. Insufficient training on sight words.	Provide methods of self-help. Hold pupil responsible for listing words on which he requested help and use them as basis of one drill.
Habitual dependence on others to supply words in oral and silent reading.	Excessive willingness of teachers or parents to supply words as needed. Failure to provide means of gaining independence in word recognition.	Make pupil aware of his dependence on others and show him how to become independent.

Interested in hearing stories but No not in reading.

Unable to read anything but very simple material, but cares only for material beyond his own reading ability.

Breaks sentences up without due regard to proper word grouping.

No need for dependence on own ability for satisfactions or reading.

Ability to read stunted as a result of being read to too much.
Interests and tastes developed and satisfied with no responsibility for growth in ability to read.

Inability to recognize thought units.
Habitual disregard of context cues.
Lack of familiarity with typical forms.
Inability to profit by punctuation marks. Restricted attention span, with inadequate anticipation of meaning. In oral reading, short eye-voice span.

Do not read to the child for a time, except as he assumes some reading responsibility or works at his reading needs.

Such responsibilities are placekeeping, reading an occasional sequent or taking

Read part of a story, stopping to let pupil read on to see how the story comes out. Condition further reading on completion of the story.

Training in phrasing.
Study for the purpose of grouping words according to thought relationships.

Reads in a stilted manner, calling off words mechanically.
Reads jerkily word by word.
Reads slowly, but not haltingly.
Reads with vocalization or lip movement during silent reading.
Keeps place with finger.
Keeps place with finger.
Excessive elecutionary effect.

Mispronun-tation
Minor mispronunciations.
Guesses words from context or initial letter. Stumbles over long or unfamiliar words.
Gross mispronunciation.
Words not in text supplied with mutilation of meaning.

Over-difficult material.

Over-emphasis on recognition and ability to call words.

Over analytical instruction.

Procedure has not stressed phrase units. Over-emphasis on oral reading.

Ing.

Over-emphasis on meanings.

Over-emphasis on "reading with expression."

Language handicap.
Speech difficulties.
Previous training has not provided good habits of recognition.
Over-dependence on context cues.
No method of analyzing or breaking up new or long words.
Vocabulary limitations.
Insufficient attention to meaning.
Material may be too difficult.

Adjust material to pupil's ability.
Approve only reading which sounds like natural talk or conversation.
Give phrase flashing with response in terms of meaning.
Prevent vocalization and discourage lip movement and place-keeping.
Increase amount of silent reading.

oral facility by using informal tests of comprehension or other checks on "thought getting."

Supply training which requires accurate recognition and discrimination between words that begin with the same letter. Emphasize accurate recognition and reduce opportunities for using context

Have other standards than mere

guage training. Give training in breaking up words, seeing familiar parts or similar elements in words, etc. Provide training in syllabication and analytical attack on long

cues in remedial exercises. Lan-

Pupil does not or cannot maintain thoughtful attitude while reading. Material is too difficult. Meagre vocabulary. Substitutions which mutilate mean-

Perhaps over-dependence on context or in oral reading. Eyes run so far ahead of voice that equivameanings are substituted. (This is not a serious matter in intermediate grades.)

Irregular habits of perception.

Fluctuating attention. Lack of motor control. Nervous instability. Timidity.

rregular progress or rate.

loss of place.

False starts. Nervousness. Skip: lines.

Worry. Fear.

Excessive ambition of pupils, par-Short attention span. Embarrassment. ent or teacher.

Adjust material to pupil's abilities. Emphasize thought getting. Dramngs and make conscious effort to atize and illustrate new meanincrease and extend meaning vocabulary. While silent reading habits are forming (Grades II and IV), do not require a great amount of oral ment by over-emphasis on oral acreading and do not retard developcuracy when meaning is not mutiated.

Permit preparation or study be-Encourage calmness and do not Suggest reduced activity, rest pe-Reduce strain and over-stimulafore requiring oral reading. Allow use of line marker. stress speed. Jods. tion.

individually

Do remedial work with such children.

Words not in text supplied with no significant change of meaning. W Sommarions, ofth Substitutions

Diagnosis

Lack of Interest in Reading. Never reads during leisure. Reads only when required to do so.	

Cares for only one type of reading matter. Cares too intensely about reading.

Excessive reading to all other leisure pursuits.

Disregard of group interests.

"Bookworm" attitude.

Withdraws from other responsibillities or opportunities, to engage in reading. Discouragement Seeming inability to learn to read.

Over-emphasis on habits and skills with insufficient provision for interest and development of permanent attitude favorable to reading. Magreness of material to satisfy interests.

Limited range of interest. Reads to satisfy desire for excitement.

Over-stimulation to read. Poor balance due to personality defects. Dislike of some other activity or factor of experience or environment.

Unsocial attitude. Lack of other interests. Consciousness of deficiency.
Wrong placement.
Repeated failure.
Inadequate satisfaction.
Method used did not enlist interest or effort.

Make interest building a major objective.

Provide opportunities for choice of materials and incentive for reading in leisure time. Provide attractive and varied materials to satisfy interests. Relate reading to an existing interest.

Broaden interests.
Encourage other interests and activities.
Build now non-reading interests.

Build new non-reading interests.
Propose interesting outdoor activities.

Limit reading opportunities by keeping pupil otherwise engaged. Make pupil responsible for sharing experience or helping others.

Prevent discouragement.
Give help as needed.
Frovide evidences of success and other inherent satisfactions.
Change method.

Inattention, listlessness. Evidences of eye-strain. Seeming word blindness. Lack of effort, fatigue. Physical Factors Defective vision.

Usual amount of practice does not Problems of Capacity Seeming stupidity. Directions misapplied. seem to suffice.

Poor physical condition due to over or under feeding or to bad physi-Defect in central nervous system. cal habits or defects. Defective hearing. insufficient sleep. Defective vision.

Gaps in learning experience, due to Confusion due to conflicting meth-Unusual difficulty in learning. Limitations of capacity. absence or illness.

Work not suited to level of matu-Deficient preparation. Language handicaps. Repeated failure.

ences.

Poorly adapted to pupil's reactions Lack of readiness or excessive difficulty of work may have caused confusion and inhibitions of effort. Foo much pressure or coercion. Over-systematic methods. or interests.

conditions and Physical examination and correccompetent oculist or ear specialist. Examination and prescription by Stress motor reactions to words. correct remediable defects. tion of removable defects. nvestigate home

Adjust expectations to pupil's ca-Remove cause of worry or emo-Provide additional learning experitional strain. pacity.

by varying amounts of practice. Adjust the work to needs. Be Provide for individual differences guided by pupil reactions rather than by formal methods. Make sure pupil has had adequate factors Do not rouse antagonism or exert which cause emotional conflict. preparation. Harmonize undue pressure.

Emotional disturbances

Antagonistic attitudes.

Tantrums. Worry. Crying.

Wrong Conception of Reading Inability to read simple material at sight. Fluency only after frequent readRepeats selection from memory without actually reading.

Inability to reproduce substance of material read with oral fluency.

Oral fluency and facility and inability to answer questions of fact Problems of Comprehension based on the material read.

Given wrong notion of what read-Rote learning or memorizing of Over-exhaustive work with reader Over-intensive work. reading matter. Narrow aims. selections.

positional Home tutoring which prepares for "lessons" without increasing abil-Not enough variety in training. Over-dependence

thought-getting. Failure to direct attention to Over-emphasis on mechanics of word recognition and oral rendi-Under-emphasis on meaning or Formal assignments by page and essons, or paragraphs without problems, questions or other stimuli. Approval for mere rendition. meanings.

stress Do not spend too much time on one Use blackboard and phrase cards for practice to avoid memorization which Use procedures story or selection. or rote learning. thought-getting.

Vary position of words and phrases by using phrase cards and black-Use questions that require reorganization of content. board work.

Provide for response in terms of Use informal tests of comprehension in connection with silent read-Correct the emphasis. meaning.

Make purposeful assignments. Direct attention to meanings.

ncreased emphasis on purposeful

Inability to form judgments on material read. Inability to select important ideas or see relationships.

quire assimilation or which do not facts and reading to prepare for formal reci-Formal purposeless assignments Over-receptive attitude while readng; assignments which do not reequire selective thinking and reack of a controlling purpose. Meagre meaning vocabulary. No incentive to real effort, Routine learning of level of attention. by page or chapter. organization. tation.

Nagged at home or school. Criticized without receiving con-Material unsuited to interests or abilities. Poor attitudes toward school or work. Over-formal work with insufficient attention to individual needs or attitudes and the development of permanent interstructive help.

anguage handicaps. Assignmenta vague. Inadequate specific nsufficient background of experihabits in-Fundamental reading ences and meanings. Sooks too difficult. study habits. dequate.

Inability to get textbook assign-

General Study Habits

Purposeful assignments which reenge to effort and work at high evel of attention. Responsibility Use multiple assignments, adjustquire thinking. Training in thought-getting. Chal-Provide additional satisfactions or opportunities for spare time. for selective thinking. silent reading.

ing them to individual needs, in-

terests, rates, and abilities.

Tie up reading with interesting activities and materials based on ex-Make school activities worth while. isting interests; give opportunities pupil evidences of growth or progress. Commend effort. Help pupil to take courage. Show for choice of material.

Provide material not too difficult. Provide background of experience Give remedial work in fundamental Broaden vocabulary of meanings. Give training in study habits. and meanings. reading habits.

Work Habits

Dawdling before beginning to read. Frequent lapses of attention while reading. Lack of sincerity, care-

lessness. Antagonistic attitude.

ideas, or perform any of the other activities involved in study in regunability to outline, organize, select lar school work, or on informal Specific Study Habits

Inability to follow printed or writ-Inability to find answers to questions. Inappropriate responses in terms of cue words or phrases. ten directions.

Dependence on incidental learning, Inadequate provision for specific training in preparation for the acor general habits. tual needs.

Habitual dependence on others for suggestion or direction. Failure to read, thinking in terms of what is to be done.

Failure to organize the elements the conditions of the question in-Slipshod work, or material too difficult as to vocabulary, sentence of a question mentally and to use telligently in the search for replies. Narrow attention span. structure, or content,

Failure to proceed in the light of a purnose and to hold a given mindset while reading in search of a given idea or set of meanings. Failure to recognize relevant mate-

rial or equivalent ideas.

Systematic use of specific practice materials similar in design to the informal tests which reveal the Training in specific study habita. need.

Practice under conditions which throw the pupil on his own responor error, and more corrective Correction or explanation of causes oractice. ibility.

tems in mind and selecting suit-Training in holding several related able answers. Individual responsibility.

rial is manifestly too difficult, in which case similar work with simbility. Pupils who fail to respond properly should be required to corpler material may be used for Fraining with individual responsiect their errors unless the matetraining. Unless caused by lack of mental capacity, training should remove marked deficiency.

S'vid4	MC66	of De	Evidences of Deficiency	Diagnosis	Remedial Suggestions
Poor attac	k on	study	Poor attack on study sesignment.	Material too difficult. Assignment too indefinite. Inability to plan and carry out work systematically.	Adjust material to ability of pupil or adjust assignments accordingly. Make assignments clear and concise. Give opportunities for learning to plan.
Partial answers. Misconceptions.	ions.			Failure to hold question in mind. Partial attention.	Make pupil individually responsi- ble for complete answers. Give
Misconstru ment.	16 <b>8</b> 9	estion	Misconstrues questions or assign- ment.	and under-potency of cutain enemia and under-potency of others. Failure to attend to relational words and conditioning clauses. Lack of training in grasping total meanings of sentences and longer units.	training which shows effects of modifiers, conditioning clauses, and words which indicate relationships. Require grasp of longer units.
Gross misconceptions and mis terpretations of reading matter.	ns of	readir readir	Gross misconceptions and misinterpretations of reading matter.	Lack of acquaintance with typical sentence structure. Failure to realize phrase meanings as units and to organize meanings while reading. Abstract material. Lack of experiences which make for adequate or correct concepts.	Use questions which cannot be answered by a single word. Give training in anticipation of meaning and organization of content in terms of big problems. Provide experiences and concrete illustrations which correct erroneous concepts. Use pictures, maps, and common experiences to explain abstract terms.

# RECOMMENDATIONS

Remedial work is most effective when deficiencies are not of long standing. It is, therefore, important to correct wrong tendencies as soon as they appear and to organize the work of the early grades so that the formation of undesirable habits and attitudes is prevented. This reduces the number of special problem cases in the intermediate and upper grades to a minimum. In any case, remedial work in reading must be specific; it must be adjusted to actual needs. The regular reading diet, or regime, should be preventive, or prophylactic; but corrective work, by utilizing ways and means which are avowedly curative or remedial, removes specific difficulties more economically and saves the pupil from the effects of lingering maladjustment and chronic deficiency.

### REFERENCES ON DIAGNOSIS AND REMEDIAL WORK

(Note.—The tabular analysis which precedes was made from a study of the following references and of certain unpublished case studies on file at the Lincoln School of Teachers College.)

- Anderson, C. J. and Merton E. "Remedial work in reading." *Elementary School Journal*, 9 (May and June, 1920), 685-701, 772-791, 21 (January, 1921), 336-351.
- Fernald, G. M. and Keller, H. "The effect of kinaesthetic factors in the development of word recognition in the case of non-readers." Journal of Educational Research, 5 (December, 1921), 355-377.
- Gates, A. I. The Psychology of Reading and Spelling with Special Reference to Disability. Teachers College Contribution, No. 129. New York: Teachers College, 1922.
- Gray, C. T. Deficiences in Reading Ability. New York: D. C. Heath and Co., 1923, Pp. vi, 320.
- Gray, W. S. "Diagnostic and remedial steps in reading." Journal of Educational Research, 4 (June, 1921), 1-15.
- Gray, W. S., with the co-operation of Kibbe, Delia; Lucas, Laura, and Miller, L. W. Remedial Cases in Reading, Their Diagnosis and Treatment. Supplementary Educational Monograph, No. 22. Chicago: Department of Education, University of Chicago, 1922.. Pp. vii, 208.
- Hollingworth, L. S. Special Talents and Defects: Their Significance for Education. New York: Macmillan, 1923, Pp. 57-97.
- Lloyd, S. M. and Gray, C. T. Reading in a Texas City: Diagnosis and Remedy. University of Texas Bulletin, No. 1853 (September, 1918), vii, 107. Austin, Texas: The University of Texas.
- Merton, E. The Discovery and Correction of Reading Difficulties. 346-363. Second Yearbook of the Department of Elementary School Principals of the N. E. A. Washington: Department of Elementary School Principals, 1923.

- Osburn, W. J. Graded and Diagnostic Paragraphs for Use in Silent Reading. Mimeographed Bulletin, State Department of Public Instruction, Madison, Wisconsin, 1922.
- Theisen, W. W. "Factors affecting results in primary reading." Twentieth Yearbook of this Society, Part II, pp. 1-25. Bloomington: Public School Publishing Co., 1921.
- Thorndike, E. L. "Reading as reasoning, a study of mistakes in paragraph reading." Journal of Educational Psychology, 7 (June, 1917), 323-332.
- Woolley, Helen T. and Ferris, E. Diagnosis and Treatment of Young School Failures. Bulletin No. 1, 1923. Washington: Department of Interior, Bureau of Education.
- Zirbes, L. "Diagnostic measurement as a basis for procedure in reading." Elementary School Journal, 18 (March, 1918), 505-552.

# CHAPTER XI

# WAYS AND MEANS OF PUTTING AN IMPROVED READING PROGRAM INTO OPERATION

Problems for consideration. It is the purpose of this section of the report to consider ways and means of putting into operation an improved program of reading instruction based on recent investigations. To school officers and teachers who contemplate such steps, a number of questions present themselves for consideration. For example: What is the present status of reading in our school system? What are the goals to be reached? What steps should be taken to provide an adequate supply of reading materials? What provisions should be made for individual differences? Through what means can an improved program be put into operation most effectively?

### SURVEY OF THE PRESENT READING SITUATION

The first step in a comprehensive campaign to improve instruction in reading is to secure accurate information concerning the present status of reading in the system and to determine what changes are desirable. Some of the items of information needed are: the levels of accomplishment in various phases of reading attained by pupils of different grades, the extent to which pupils use books independently and effectively in connection with various school activities, the number and kinds of books provided in each grade. desirable habits at different growth levels, the extent to which such habits have been established, the methods employed by teachers in training pupils to read, and the kinds of help that are needed to raise instruction to a high level of efficiency. The survey should reveal also the effectiveness of methods now in use, the adequacy of the materials of instruction, and the efficiency of teachers and supervisors. If intelligence tests are given, the survey should show the mental levels of pupils in different schools and grades and the extent to which they accomplish what may reasonably be expected of them. Securing accurate information is so essential that the preliminary survey should be undertaken in the most scientific way possible and should make use of every available agency. Suggestions follow concerning the service which may be rendered by teachers and school officers.

The classroom teacher. There are progressive teachers in every school unit eager to take part in any forward movement. Frequently, such teachers have been trained to give, to score, and to diagnose the results of both informal and standardized tests. If they have not had such training, they are usually very glad to learn. A large number of teachers trained to give tests and to collect information may render invaluable service in a study of present accomplishments and needs. They may also supply needed information concerning the books that are available, the methods employed in teaching, the time devoted to reading, and the strong and weak points in the reading accomplishments of pupils as revealed in classroom activities.

The building principal. The building principal, by virtue of his position, may render very valuable assistance. He can organize the teachers under his supervision into a working unit for survey purposes; he can train them to give tests or to tabulate needed information, and he can make arrangements to release teachers to assist in the survey, many times taking over the work of a teacher who may be able to participate in certain phases of the survey more effectively than he.

The director of research. Where there is a department of research, the director should aid in planning to measure reading achievement and intelligence, should distribute the tests and directions sheets that may be required, should direct much of the statistical work that is needed, and should summarize and help interpret the results of the standardized and informal tests that are given.

The superintendent or supervisor of instruction. These officers may or may not be active in such routine work as giving and scoring tests, but it is essential from an administrative and supervisory point of view that they direct the survey. They should provide the necessary vision and leadership. They should direct the organization of the survey, provide the material means for carrying it forward, keep in constant touch with the information that accumulates, and aid in the interpretation of results for the city as a whole.

Other agencies. Colleges of education and normal schools that are conveniently located may detail students to aid in the initial survey. In rural schools the visiting supervisor or supervising teachers may render very valuable help.

The fact should be emphasized that there are numerous agencies

which may participate in the survey of the reading situation in a given school system. Experience has taught that the possibilities of success, both in securing information and in effecting desired reforms, are far greater if all agencies directly responsible for instruction co-operate heartily in each step of the campaign.

The additional fact should be emphasized that the study of the entire situation should be distributed over a considerable period of time. It is unwise to interrupt seriously regular classroom activities. Only a limited number of studies should be undertaken at a given time. As results accumulate, they should be presented to the teachers and their significance considered. Whenever evidence is secured that changes are desirable, appropriate steps should be taken throughout the system to secure improvement. In the meantime, the study of other phases of the reading situation should go forward.

### GOALS TO BE REACHED

A well-organized study of the present reading situation should result in a clear picture of existing conditions and desirable changes. The problem which then presents itself is how to change existing conditions to those that are more nearly ideal. For example, old courses of study are frequently inadequate and new objectives must be determined. It has been the purpose of preceding chapters of this report to present materials that are valuable in this connection. Ultimately, however, each school system must determine its own objectives according to the needs, interests, and capacities of the pupils who are to be taught.

But who should formulate the objectives and plan courses of study? For the sake of sound professional progress, it is necessary that all units of the school system participate actively. Classroom teachers should contribute results from practice and experience. Supervisors, principals, and superintendents should contribute helpfully from their wider knowledge of the subject and broader view of school problems. Active co-operation of teachers and school officers in an enterprise of such large significance is essential to success.

Progressive schools have already formulated tentative courses of study through co-operative effort. The St. Cloud course of study in reading is an excellent example of the constructive work of teachers and supervisors covering a period of over three years. The following outline of their work presents features worthy of consideration.

- The attempt has been made to make practical application for the classroom teacher of the most recent development in the theory of teaching reading.
- 2. Educative seatwork in silent reading has been developed.
- 3. A number of unstandardized silent reading tests have been worked out for the use of the classroom teacher.
- A definite plan of reading procedure has been mapped out for the intermediate grades.
- A clear-cut distinction has been made between reading for appreciation and reading for study.
- 6. A beginning has been made in selecting and in training in varied types of study used in different subjects as needed by the child in his development from grade to grade.

The course of study has been published in loose-leaf form for the use of the teachers in the St. Cloud system. This plan was adopted in order that additions and corrections can be made from time to time in harmony with the results of scientific studies of the problems of reading instruction.

A survey of the reading situation in Tulsa, which revealed unsatisfactory results in silent reading, led to a drive for efficiency in that type of reading. After two years of study and classroom experimentation by the teachers, a 56-page bulletin<sup>2</sup> concerning diagnostic and remedial steps in silent reading was published. This bulletin is rich in suggestive material and shows what co-operative effort can accomplish.

In Rochester a study was made of the aims of reading. For two years classroom teachers worked co-operatively to develop a series of uniform aims for that city. As a result, a report was compiled and a chart embodying the conclusions was prepared by a committee

<sup>&</sup>lt;sup>1</sup> Ruth Ewing Hilpert. Reading in the Saint Cloud Public Schools, Grades One to Six. Board of Education, St. Cloud, Minnesota, 1924.

<sup>&</sup>lt;sup>2</sup> Diagnostic and Remedial Suggestions for Silent Reading in the Elementary Schools of Tulsa, Oklahoma. Board of Education, Bulletin No. 12, 1921-22.

representing the elementary schools.<sup>3</sup> This chart shows graphically and concisely attainments for each grade in each of four objectives, namely:

- 1. Permanent interests in reading
- 2. Economical and effective study habits
- 3. Economical and effective use of books
- 4. Mastery of the mechanics of reading

These examples indicate what may be accomplished through cooperative effort in reorganizing a course of study in reading and in creating usable materials of instruction. Each school system should organize for such purposes committees composed of capable teachers and supervisors. They should be released from a part or all of their regular duties in order to give adequate time to the problems assigned to them for study. They should not only canvass all of the printed materials relating to their problems, but should also enlist the hearty co-operation of all teachers in the system and secure constructive suggestions from them

In outlining a course of instruction not only broad comprehensive objectives, but intermediate goals, must be set up, in order that specific aims may be clearly defined and progress checked from time to time. Chapters II and IX of this report contain much material that can be used in formulating such objectives and in checking progress. Three major objectives which apply to all elementary-school grades are: (a) rich and varied experience through reading, (b) strong motives for and permanent interest in reading, and (c) desirable attitudes and effective habits and skills.

Qualitative and quantitative standards of achievement are given for each growth period of the first six grades. While such information is of the greatest value to a committee that is making a course of study, the fact should be emphasized that each school system must adopt aims and standards appropriate for its own use. A course of study must be based on actual needs, such as are revealed by the type of survey which has been described. It must include the

Joseph P. O'Hern, "The development of a chart for attainments in reading," Journal of Educational Research (March, 1921), pp. 180-194.

<sup>3</sup> Mabel E. Simpson, "The development of standards in reading an important function of supervision," The Journal of Educational Method (June, 1923), pp. 420-429.

most effective ways of meeting those needs as determined by clear thinking and scientific study of such problems.

# PROVISION OF ADEQUATE READING MATERIALS

A modern reading program is characterized by an abundant supply of appropriate reading materials. Adequate provision of such materials presents a difficult problem. In the majority of schools the supply of books is meager and inadequate. School systems must provide more books, must establish libraries, must secure the cooperation of public libraries, and must provide additional pedagogical materials. In order to supply these demands, a larger reading budget is frequently necessary. Wisdom and skill are needed in the expenditure of whatever funds are available. How can desired ends be attained most economically and effectively?

Classroom materials. In Chapter VII of this report the following recommendations are made for each class or working group: One complete set of primers and one set of literary readers in Grade I: one complete set of literary readers and one set of the silent reading or work type in Grades II and III; one reader or book of literary selections and one of the work type for the development of study habits in Grades IV, V, and VI. This at once reduces the number of sets of readers from between four and twenty or more for each grade to two full sets. As a result, funds are released that can be used to provide many sets of from five to ten well-selected books of both the work and recreatory types for use with small groups of children having common needs and interests, and also to provide many single copies for individual reading. Some of this money can also be used for the purchase of the supplementary pedagogical material elsewhere described, which is so essential in developing appropriate habits and skills.

These recommendations are not made primarily as emergency measures, but in the belief that adequate provision for the individual needs of children requires less mass and more individual instruction. The same book in the hand of every child usually means waste and inefficiency in teaching.

School libraries. It is essential that appropriate library material be secured for every classroom. There should be in the kindergarten and primary grades a library table where attractive books are avail-

able for constant use; in the fourth, fifth, and sixth grades, the well-organized work library; and in the junior and senior high school, the special room library. Where appropriations by boards of education are not sufficient, wise publicity is helpful. Mothers' clubs, parent-teacher organizations, and citizens' associations, when convinced of the need, will frequently raise funds to provide such libraries. Where money is so raised, it should be spent by those who are familiar with school needs.

Public libraries. Since a modern reading program requires a wealth of appropriate reading materials, school officers and city librarians are beginning to realize the mutual advantage of cooperation between school and public libraries. Cities in which cooperation exists vary in the specific plans which they follow. Some illustrations are here given:

Washington, D. C.: 4 The Public Library makes loans of fifty suitable miscellaneous library books three times each semester to each grade, beginning with the third (the second by request). Conferences between the librarian and the supervisors insure a close correlation with the course of study. Suggestions from classroom teachers are also valuable. Records on the individual cards accompanying each book aid in checking the type of reading done by children of various communities, who thus early learn to use the library and to care for books.

Cleveland: The School and Library Association, working together, aim to secure for every child access to a branch library in or near the school. A specially trained expert gives instruction in the use of books at the different distributing centers. In many cities the public library maintains branch libraries in school buildings.

Indianapolis: This city features a vacation reading contest. In the summer of 1922 over ten thousand volumes were chosen, read, and reported on. Children were given credit for this reading.

California: The county library is the result of an effort to carry books to rural districts in a more intimate way than can the travelling state libraries. The Kern County library began its work with schools in 1916. There are 100 schools in this country, varying from large city schools to one-room buildings in the mountains or desert. Each teacher has a minimal fund of \$25.00 so that she may contract with the county library for service. To each school, regardless of size, the library sends supplementary books on all subjects for the use of pupils and desk books for the teachers. In addition, periodicals are provided for the teacher and pupils and sent directly to the school. The children's librarian visits each

<sup>&</sup>lt;sup>4</sup> George F. Bowerman, Annual Report for Public Library of the District of Columbia, 1923-24. Government Printing Office, 1924.

school, talks with the teachers and pupils, discusses stories and books with them, and supplies reading materials in harmony with their needs and interests.

North Dakota: In a plea made for county libraries in North Dakota by Mary Elizabeth Downey, Librarian and Director, North Dakota Library Commission, Bismarck, N. D., the following reasons for such service were given among others:

Supplements the public school course of study with material for general reading and reference.

Creates a generation of readers of children now in the public school.

Supplies the demand for books which the schools now create.

The press. The daily press should provide children's pages, sections, or columns. These sections should be in the hands of editors having knowledge of the interests and reading needs of children of different ages Experience teaches that the press can make a real contribution in stimulating interest and developing permanent habits on the part of children in reading newspapers and periodicals.

Extra-school aids. The earlier chapters of this report emphasized the need of a rich background of experience at each age level. It is necessary, therefore, to provide adequate material for varied experiences. A survey by the teachers of the interests and activities of a community is usually necessary. These interests vary; those of rural and small towns differ widely from those of the large city. Classroom activities based on these interests will be used in various subjects, including reading, but will prove of special value in the interpretation of what is read. The second problem is to bring the child in contact with community activities. This means effective use of the so-called school excursion. To obtain first-hand information, children must be taken to markets, to truck gardens, to factories; they must be taken to the various geographical features of the vicinity, to museums, and to art galleries for definite study and help.

There is need for wise publicity if wholesome experiences are to be provided for children. The difficulties to be overcome are: first, objections made by parents, by members of boards of education, and sometimes by school officials, that there is waste of time and some danger to pupils; and second, lack of satisfactory means

<sup>&</sup>lt;sup>5</sup> W. S. Learned, American Public Library and the Diffusion of Knowledge, Harcourt, Brace Company, 1924.
Arthur E. Bostwick, American Public Library, Appleton, 1923.

of transportation. The school board and the community should be informed concerning the value of excursions and their co-operation should be secured in providing for them. A large amount of reading of the work type can be assigned in preparation for these excursions, and both the work and pleasure type of reading should follow to broaden and enrich the experience gained through them.

# PROVISION FOR INDIVIDUAL DIFFERENCES

A reading survey frequently reveals misplacements of pupils; for example, children of sixth-grade ability work at third-grade level, and fifth- and sixth-grade children exhibit reading habits not above those required for the third or fourth grade. Such facts show clearly that the reading needs of many children are not being met. In order to provide for individual differences, provision must be made for a better classification of pupils than now exists in a majority of schools. Logically, the best place to begin with such classification is in the kindergarten and first grade, where reading habits are being formed. Chapter II of this report suggests plans for classifying pupils in schools of different types. But proper classification in the initial period will not provide adequately for the needs of children who have passed beyond this period. A flexible plan of class organization and frequent reclassification are essential throughout the grades. Superintendents and supervisors should develop flexible schemes of class organization and instruct teachers concerning the procedures to follow in re-grouping pupils from time to time for the purposes of reading instruction.

Since some pupils learn more easily than others, the amount of instruction required should vary with different pupils. Mass teaching must be supplemented by individual instruction even in schools in which classes have been organized on the basis of needs. The plan of grouping should be flexible enough to allow pupils to work in the group which best provides for their needs. Provision should also be made in the daily program for pupils needing remedial work when teachers specially trained for such purposes are not available.

Some cities classify pupils for the purpose of reading instruction on the basis of intelligence. The following plan is used in Detroit: Pupils who enter the first grade are classified in X, Y, and Z groups, according to the results of intelligence tests. These groups

are sometimes assigned to different rooms; sometimes all three work together in the same room. Definite standards of attainment are established for each ability group. By the end of the sixth grade all groups are expected to have mastered the fundamentals of reading, but to have attained varying levels of accomplishment; the X group will have had wide reading experience; the Z group will at least have mastered the mechanics of reading.

In contrast with the organization of classes into homogeneous groups is the plan of individual instruction in which each child is familiar with the goals to be attained, and works independently toward them. When he reaches one goal, he moves on to the next, thus eliminating waste. This does not necessarily mean a change of rooms. As this plan of instruction is organized in Winnetka, Illinois, the achievement unit takes the place of the time unit. Children's marks and promotions are based entirely upon individual work. There are no recitations, no grade repetitions, no failures, no skipping. Instead of reciting, the children practice and prepare themselves for achievement tests. The teacher helps individual pupils and develops new work with small temporary groups of children who happen to be ready for the same instruction at a given time.

The plan is made administratively possible by achievement tests corresponding to each goal and by practice materials in connection with which the children can check the accuracy of their own work.

If a modern program of reading instruction is adopted, provision must be made for individual differences. Responsibility for the development of a flexible plan of class organization rests primarily with the administrative and supervisory officers. The importance of an early solution of this problem in each school system cannot be over-emphasized.

# MEANS OF PUTTING THE PROGRAM INTO OPERATION

It is essential that there be hearty co-operation of all units of the school system in putting an improved reading program into operation. Examples of types of co-operation follow:

Classroom teachers. In final analysis the improvement of instruc-

<sup>&</sup>lt;sup>6</sup> Carleton W. Washburne, "Educational measurement as a key to individual instruction and promotions," *Journal of Educational Research*, 5 (March, 1922), 195-206.

tion depends primarily upon classroom teachers. A school system may have an excellent course of study, a wealth of valuable reading material, and well-classified pupils, yet fail to develop effective readers because of the character of the teaching. What means can be used to encourage progressive teachers to assume leadership in launching a new program of reading instruction? What can be done to awaken lethargic teachers to interest in improving their own teaching methods? What can be done to improve the poorly trained teachers who either know nothing of modern methods or are ineffective in making use of them? A number of suggestions of value in meeting these difficulties follow.

Meetings. Well-planned meetings may be one of the most effective means of securing results, but they are productive only to the degree in which there is intelligent participation by both teachers and supervisors. Each sees the problem from different points of view and is prepared to make helpful contributions. A meeting should be a clearing house where problems are presented for discussion and where results of experiments are summarized and interpreted. How to organize meetings to secure best results is the problem of the supervisor. Clearly the needs of teachers differ. Groups should frequently be organized on the basis of both subject and grade needs. Within these groups committees should be formed with definite problems for solution. The study of these problems should do much towards building up better standards for use in teaching reading. Suggested problems are:

- How may daily program be organized to provide for small group and individual needs?
- How may training in silent reading result in the improvement of habits of study?
- 3. What are the best methods of handling vocabulary difficulties in silent reading?
- 4. How may training in phonetics be made effective?

Circulation of literature. The study of definite problems by committees should make it necessary for teachers to consult sources of help. The supervisor should be ready with appropriate references, bulletins, monographs, magazine articles on definite phases of reading. All should be available for circulation. There should be classified bibliographies. Material should be in the library of every building or should be easily accessible. Public libraries should co-operate by

purchasing and reserving for teachers whatever literature is needed. Study clubs and reading circles are usually productive in promoting interest in professional reading.

Demonstration. Although practically every educational magazine has discussed the teaching of silent reading in detail, many teachers fail to comprehend its real significance. In many places, reading activities follow largely the traditional types of work. Nothing convinces so thoroughly or is so stimulating as seeing results achieved by a skilful teacher. Demonstrations also provide excellent opportunities to capitalize the ability of individual teachers. If demonstrations are to be effective, teachers must come with well-defined aims and must be active participants in the discussions that follow.

Extension work. Opportunities for the systematic study of reading problems should be provided. In some localities, notably in rural sections, the county institute may be used for this purpose; in other localities a series of lectures, round tables, and conferences extending throughout the school year is arranged. Whatever provision is made for systematic study, it should be made a source of definite help in developing a new reading program. Supervisors should learn of experts in the field who can bring to their teachers the type of help which they need. Does the group need the stimulus of the scientific worker to open new fields of investigation or to give help in investigations already started? Does the group need clear demonstration by a skilful teacher followed by discussions or lectures concerning appropriate teaching techniques?

Greater use should be made of the courses on reading in summer schools and colleges of education. Teachers should be stimulated to take modern courses on reading, in order that they may render greater service in putting an improved program into operation. It is advisable that each school system send at least two or three of its staff each summer to make studies of particular problems and to prepare for genuine service and leadership during the following year.

Supervisors. The first obligation of supervisors is to create interest in modern reforms in reading instruction and to stimulate a desire to bring practice up to the highest level of efficiency. A supervisor should not be content with intangible results. She must know not only the ultimate goals of reading instruction but the intermediate

goals as well. As the new program is put into operation, she should help teachers establish standards of attainment and to measure results step by step. In this connection there is need of the closest co-operation. The supervisor brings to the teacher encouragement for the successes attained and helpful suggestions for further progress. The teacher brings knowledge of actual conditions and concrete suggestions for meeting them. Through individual and group conferences, classroom visits, and meetings and demonstrations, supervisors should provide teachers with constant help and encouragement.

It is the supervisor's duty to make use of special knowledge or ability of individual teachers. If a primary teacher has gained an understanding of the fundamental principle underlying individual differences and is able to deal with them effectively, her methods and procedures are of value not only to her own class but also to the whole teaching staff. Her classroom should be made an observation center for teachers who need help in this connection. If in the intermediate grades there are teachers who are especially capable in developing in children an appreciation of good literature, or independence in going to source books for desired information, their methods should be observed by, or described to, other teachers. It is a supervisor's business to locate skilful teachers and use them to advantage in improving instruction. Such teachers should be encouraged, provided with needed materials, stimulated to wider reading and professional growth, and given recognition for the real contribution their teaching makes to the system.

Superintendent. The superintendent should assume leadership in putting a new reading program into operation, should provide the necessary material means, should organize the supervisory and teaching staff to render the most effective help, should make careful studies of the latest developments in reading, and present and interpret significant findings to his teachers from time to time or secure experts who are qualified to do this for him. He must keep in constant touch with developments in his school system and must see that all units work together co-operatively in improving instruction. His responsibility is great because it involves an unlimited amount of vision, leadership, and tact.

Boards of education and school patrons. If interest is aroused in

what the schools are doing and what they aim to do, boards of education and school patrons can definitely aid in improving reading instruction. Through lectures, demonstrations, graphs, and slogans they can be informed of the present situation and needed reforms. Patrons should lend their sympathy and support to such educational policies and should encourage boards of education to supply as liberal a budget as necessary to insure success.

# CONCLUDING STATEMENT

The suggestions contained in this chapter have been made with a full recognition of the fact that the means employed in putting an improved program into successful operation must differ with conditions in different cities. Consequently, only examples of appropriate procedures have been included. It is imperative, however, that each school system devote time and energy to the study of the problems which have been discussed. The public pays liberally to support education. It is our responsibility to insure to the present generation of pupils the most effective instruction in reading that schools can provide.

# **CHAPTER XII**

# SUMMARY OF OUTSTANDING RECOMMENDATIONS AND SUGGESTED PROBLEMS IN URGENT NEED OF INVESTIGATION

# I. SUMMARY OF OUTSTANDING RECOMMENDATIONS

Of the numerous recommendations in the report, some are of major importance and should be carefully considered in any effort to reorganize or improve reading instruction; others relate to matters of detail and are of lesser significance. In order to direct attention, in closing, to issues of fundamental importance, the following summary of outstanding recommendations to which the committee unanimously subscribes has been prepared. These, at least, are essential to a satisfactory program for the teaching of reading:

- 1. A broad conception of the aims of reading instruction, based on a clear understanding of its wide significance in school and other life activities.
- 2. Vigorous emphasis from the beginning on reading as a thought-getting process and the subordination of the mechanics of reading to thoughtful interpretation.
- 3. A clear recognition of the vital contribution of wide experience to good interpretation, with special emphasis on pre-reading experiences and the temporary postponement, if necessary, of formal instruction in reading.
- 4. Provision for wide reading as an essential means of extending experience and of cultivating strong motives for, and permanent interests in, reading.
- 5. A significant increase in the amount and variety of reading materials and a corresponding improvement in their quality.
- 6. A clear recognition of the fact that both recreatory and worktype reading are essential in a well-balanced program of instruction.
- 7. Definite provision for the systematic development and independent use of specific reading and study habits in all school subjects.
- 8. Emphasis on the enjoyment of literature as a means of fuller living, rather than on analysis and detailed study technique in this field.

- 9. New types of organization and procedure in classes made necessary by the adoption of broader aims of reading.
- 10. Adequate provision for differences in individual capacities, needs, and tastes.
- 11. The classroom use of informal tests as essential means of discovering group and individual needs.
- 12. The continuous study of progress toward the essential objectives of reading, namely: wide experience, strong motives for, and permanent interests in, reading, and effective habits and skills.

# II. PROBLEMS IN URGENT NEED OF INVESTIGATION

The fact has been emphasized earlier that the committee frequently found it necessary in preparing recommendations to make use of the results of incomplete or inadequate studies, or to depend solely on critical judgments. Consequently, some of the recommendations included have been necessarily tentative in character. Before final conclusions can be drawn concerning many issues on which the committee has merely expressed its opinion, it will be necessary to secure additional scientific evidence. As a means of directing attention to some of these problems, the committee has prepared the list which follows. It is evident that the list is incomplete. It has been prepared solely to suggest types of problems that are in urgent need of investigation.

# 1. Classroom Organization

- (a) How should classes be organized to provide for the maximal development in reading of each child in harmony with his interests, tastes, and capacities without undue interference or waste?
- (b) To what extent should the reading in specific subjects, such as history, science, and English, be organized upon an individual problem basis?

# 2. Analysis of Specific Habits

- (a) What are limits and characteristics of important growth periods in all phases of reading through which pupils pass in their progress toward maturity?
- (b) What are important types of difficulty encountered in the use of textbooks and study materials in content subjects?
- (c) What are the specific techniques involved in work-type reading in each subject of the curriculum?

# 3. Study Attitudes

- (a) To what extent should pupils be made aware of specific techniques in reading as contrasted with provision of strong motives for and freedom from specific directions?
- (b) How may appropriate attitudes toward work-type reading and study be cultivated?

# 4. Diagnosis and Remedial Work

- (a) What are the specific practice materials needed in prophylactic and remedial work and how may their validity be determined experimentally?
- (b) What are the most effective means of diagnosing reading and study deficiencies in the upper grades and the high school?
- (c) What are appropriate remedial measures for each type of difficulty?

# 5. Interests and Appreciations

- (a) What classroom technique may be used for comparing and recording growth in interests and appropriate attitudes toward reading and in appreciation of specific books and selections?
- (b) What effects on reading interests, attitudes, and appreciations are secured by (1) unsupervised reading and (2) carefully directed supplementary reading?
- (c) What books are genuinely liked by children in each school grade and are also good literature?
- (d) What types of reading material should be used in cultivating permanent interests in reading on the part of all pupils?
- (e) What are the classroom procedures best suited to cultivate permanent interest and habits of independent reading?
- (f) What choices in reading occur in each period of development with respect to various types of literature, such an informational selections, stories, poetry?
  - 6. Relative Effectiveness of Different Teaching Procedures
- (a) What is the effect on reading attitudes and comprehension of presenting factual material in story form?
- (b) What conditions are most favorable in work-type reading: one or two complete sets of textbooks; or some combination of these?

(c) How may meanings be enriched, vocabularies extended, concepts clarified, and significant relationships grasped?

# 7. Vocabulary

- (a) What are the speaking and meaning vocabularies of children in the various periods of development in reading?
- (b) What is the relative importance of various words in reading vocabularies of young children?

# 8. Phonetics

- (a) What is the frequency of various phonetic elements in the reading vocabularies of children at various levels of development?
- (b) What are the form and sound elements most easily learned by pre-school children?
- (c) What tests may be used in discovering the needs of children with respect to the phonetic analysis of words?

# 9. Literature

- (a) What attitudes toward reading develop and how are tastes refined when directing attention to appreciation of literature for its own sake, and when reading for the enjoyment of experience?
- (b) What objective tests can be developed for the measurement of appreciation of, and wholesome attitudes toward, the reading of literature?
- (c) To what extent are true-false or multiple choice tests of value in testing comprehension in the study of literary selections?

# 10. Standards of Attainment

- (a) What are appropriate tests for use in classifying children at each level of advancement?
- (b) What are desirable standards for each grade or age in achieving the broader objectives of reading instruction?
- (c) What are desirable variations in standards for children at different levels of capacity?

# 11. Pre-Reading Experience

(a) What are the experiences required by different types of young children in preparing for reading?

# 12. Mechanical Make-Up of Books

- (a) What is the effect of length of sentences upon comprehension?
- (b) What is the effect of breaking a phrase at the end of a line and of irregularities in the left-hand margin on speed and comprehension in reading?
- (c) What are the effects of various types of illustrations upon interests and comprehension in reading?

# 13. Economy of Time

- (a) How can the time allotment in reading in the primary grades be reduced without lessening the effectiveness of instruction?
- (b) How can incidental reading experiences be utilized more effectively in securing rapid progress in primary reading?

# 14. Number of Books

- (a) What are desirable standards as to number of books available per child in each grade in each subject?
- (b) How may an adequate supply of books be provided in each school system?

# CONSTITUTION OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

(As Revised at the 1924 Meeting of the Society)

### Article I

Name.—The name of this Society shall be "The National Society for the Study of Education."

#### Article II

Object.—Its purposes are to carry on the investigation of educational problems, to publish the results, and to promote their discussion.

#### Article III

Membership.—Section 1. There shall be three classes of members—active, associate, and honorary.

Section 2. Any person who is desirous of promoting the purposes of this Society is eligible to membership and shall become such on payment of dues as prescribed.

Section 3. Active members shall be entitled to vote, to participate in discussion, and under certain conditions, to hold office.

Section 4. Associate members shall receive the publications of the Society, and may attend its meetings, but shall not be entitled to hold office, or to vote, or to take part in the discussion.

Section 5. Honorary members shall be entitled to all the privileges of active members, with the exception of voting and holding office, and shall be exempt from the payment of dues.

A person may be elected to honorary membership by vote of the Society on nomination by the Board of Directors.

Section 6. The names of the active and honorary members shall be printed in the Yearbook.

Section 7. The annual dues for active members shall be \$2.00 and for associate members \$1.00. The election fee for active and for associate members shall be \$1.00.

#### Article IV

Officers.—Section 1. The officers of the Society shall be a Board of Directors, a Council, and a Secretary-Treasurer.

Section 2. The Board of Directors shall consist of six members of the Society and the Secretary-Treasurer. Only active members who have contributed to the *Yearbooks* shall be eligible to serve as directors.

Section 3. The Board of Directors shall be elected by the Society to serve for three years, beginning on January first after their election. Two members of the Board shall be elected annually (and such additional members as may be necessary to fill vacancies that may have arisen).

This election shall be conducted by an annual mail ballot of all active members of the Society. A primary ballot shall be secured in October, in which the active members shall nominate from a list of members eligible to said Board. The names of the six persons receiving the highest number of votes on this primary ballot shall be submitted in November for a second ballot for the election of the two members of the Board. The two persons (or more in the case of special vacancies) then receiving the highest number of votes shall be declared elected.

Section 4. The Board of Directors shall have general charge of the work of the Society, shall appoint its own Chairman, shall appoint the Secretary-Treasurer, and the members of the Council. It shall have power to fill vacancies within its membership, until a successor shall be elected as prescribed in Section 3.

Section 5. The Council shall consist of the Board of Directors, the chairmen of the Society's Yearbook and Research Committees, and such other active members of the Society as the Board of Directors may appoint from time to time.

Section 6. The function of the Council shall be to further the objects of the Society by assisting the Board of Directors in planning and carrying forward the educational undertakings of the Society.

#### Article V

Publications.—The Society shall publish The Yearbook of the National Society for the Study of Education and such supplements as the Board of Directors may provide for.

#### Article VI

Meetings.—The Society shall hold its annual meetings at the time and place of the Department of Superintendence of the National

Education Association. Other meetings may be held when authorized by the Society or by the Board of Directors.

## Article VII

Amendments.—This constitution may be amended at any annual meeting by a vote of two-thirds of voting members present.

# MINUTES OF THE CHICAGO MEETING OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

(February 23, 26, and 27, 1924)

The first meeting of the Society was a joint meeting with the National Vocational Guidance Association and the Department of Vocational Education and Practical Arts of the National Education Association. Owing to errors made by those in charge of arrangements at Chicago, this session could not be held in the Gold Room of the Congress Hotel as advertised and it was necessary to pack to the suffocation point the Florentine Room with its nominal capacity of 600. President Judd called the meeting to order at 8:05 Saturday evening, February 23rd, and after a few words of explanation concerning the matter of the Yearbooks and the evening's program, introduced as presiding officer for the evening Mr. John N. Greer, Assistant Superintendent of Schools, Minneapolis, Minnesota, and President of the Department of Vocational Education and Practical Arts of the National Education Association.

The following program was then presented, based upon Part II, Section 1 (Vocational Guidance) of the 23rd Yearbook of the Society, entitled "Vocational Guidance and Vocational Education for the Industries":

- I. "RECENT INDICATIONS OF PROGRESS IN VOCATIONAL GUIDANCE." Harry D. Kitson, Professor of Psychology, Indiana University, and President of the National Vocational Guidance Association.
- II. "WHAT IS THE GUIDANCE EMPHASIS IN OUR PUBLIC SCHOOLS?"
  A. H. Edgerton, Supervisor of Vocational Information and Guidance, Teachers College and the Lincoln School, Columbia University, New York City, New York.
- III. "OUTSTANDING DEMANDS FOR GUIDANCE ACTIVITIES IN A CITY SYSTEM."
  - H. H. Bixler, Director of Vocational Guidance, Atlanta, Georgia.
- IV. "How the Problems of Guidance Are Met in a Small City."

  John Friese, Technical High School, St. Cloud, Minnesota.
  - V. "TRAINING PROGRAMS FOR THOSE WHO ARE RESPONSIBLE FOR VOCA-TIONAL GUIDANCE."
    - John M. Brewer, Director of Bureau of Vocational Guidance, Harvard University, Cambridge, Massachusetts.

VI. "CRITICAL REVIEW OF PRESENT DEVELOPMENTS IN VOCATIONAL GUIDANCE WITH SPECIAL REFERENCE TO FUTURE PROSPECTS."

George E. Myers, Professor of Vocational Education, School of Education, University of Michigan, Ann Arbor, Michigan.

#### DISCUSSION:

Helen T. Woolley, Psychologist, Merrill-Palmer School, Detroit, Michigan.

Emery Filbey, Dean of the Extension College, University of Chicago, Chicago, Illinois.

The discussion from the floor was participated in by Mr. H. D. Hatch of Chicago, Asst. Supt. Hamilton of Sioux City, Mr. Humboldt of Rockford, Illinois; Mrs. Woolley of Detroit, and others.

The second meeting of the Society was held in the Gold Room of the Congress Hotel, Tuesday, February 26th at 8:00 p. m. The audience of some 1200 persons completely filled the auditorium and listened with interest to the discussion of Part I of the 23rd Yearbook of the Society, on "The Education of Gifted Children." President Judd presided while the following program was given:

- I. "THE WORK OF THE COMMITTEE ON THE EDUCATION OF GIFTED CHILDREN."
  - Guy M. Whipple, Professor of Experimental Education, University of Michigan; Secretary of the Society, and Chairman of the Committee.
- II. "METHODS OF SELECTING SUPERIOR CHILDREN IN SCHOOL." Bird T. Baldwin, Director of the Iowa Child Welfare Research Station, Iowa City, Iowa.
- III. "CHARACTERISTIC AND SIGNIFICANT DIFFERENCES BETWEEN THE "X" AND "Z" Pupils in the Detroit Schools."
  - Anna M. Engel, Assistant Supervisor of Special Education, Detroit, Michigan.
- IV. "THE SCHOOL PROGRESS OF SUPERIOR PUPILS UNDER A SYSTEM OF INDIVIDUAL INSTRUCTION."
  - Carleton W. Washburne, Superintendent of Schools, Winnetka, Illinois.
- V. "SCIENTIFIC EVIDENCE BEARING ON SPECIAL TREATMENT OF GIFTED CHILDREN."
  - Frank N. Freeman, Professor of Educational Psychology, University of Chicago, Chicago, Illinois.

#### DISCUSSION:

Harvey G. Townsend, Professor of Education, Smith College, Northampton, Massachusetts.

H. H. Goddard, Professor of Abnormal and Clinical Psychology, Ohio State University, Columbus, Ohio.

In the discussion that ensued, remarks were made by Messrs. Rugg, West, Gary Myers, and Miss Laura Zirbes. There was also discussion between Messrs. Baldwin and Freeman concerning certain points which had been introduced by Dr. Freeman in his paper. The discussion was concluded by Dr. Whipple.

Immediately after this program was held the Business Meeting of the Society:

The following changes in the Constitution of the Society (sections not cited to remain as at present) were adopted with no dissenting vote:

#### ARTICLE II

Object:—Its purposes are to carry on the investigation of educational problems, to publish the results, and to promote their discussion.

#### ARTICLE III

Section 2. Any person who is desirous of promoting the purposes of this Society is eligible to membership and shall become such on payment of dues as prescribed.

Section 3. Active members shall be entitled to vote, to participate in discussion, and under certain conditions, to hold office.

#### ARTICLE IV

Officers:—Section 1. The officers of the Society shall be a Board of Directors, a Council, and a Secretary-Treasurer.

Section 2. The Board of Directors shall consist of six members of the Society and the Secretary-Treasurer. Only active members who have contributed to the Yearbooks shall be eligible to serve as directors.

Section 3. The Board of Directors shall be elected by the Society to serve for three years, beginning on January first after their election. Two members of the Board shall be elected annually (and such additional members as may be necessary to fill vacancies that may have arisen).

This election shall be conducted by an annual mail ballot of all active members of the Society. A primary ballot shall be secured in October in which the active members shall nominate from a list of members eligible to said Board. The names of the six persons receiving the highest number of votes on this primary ballot shall be submitted in November for a second ballot for the election of the two members of the Board. The two

persons (or more in the case of special vacancies) then receiving the highest number of votes shall be declared elected.

Section 4. The Board of Directors shall have general charge of the work of the Society, shall appoint its own Chairman, shall appoint the Secretary-Treasurer, and the members of the Council. It shall have power to fill vacancies within its membership, until a successor shall be elected as prescribed in Section 3.

Section 5. The Council shall consist of the Board of Directors, the chairmen of the Society's Yearbook and Research Committees, and such other active members of the Society as the Board of Directors may appoint from time to time.

Section 6. The function of the Council shall be to further the objects of the Society by assisting the Board of Directors in planning and carrying forward the educational undertakings of the Society.

### ARTICLE V

For "Executive Committee," read "Board of Directors."

#### ARTICLE VI

For "Executive Committee," read "Board of Directors."

After the adoption of these changes in the Constitution, the following subsidiary recommendation was unanimously adopted:

## Subsidiary Recommendation

In order to provide continuity of policy and personnel, it is recommended that the present members of the Board of Trustees and of the Executive Committee and the retiring president constitute the Board of Directors for 1924, that is, until the new plan shall go into operation, and that the present Secretary-Treasurer continue in office until the expiration of his present term of appointment.

It is further recommended that on December 31st, 1924, two members of the then Board of Directors (as determined by the Board) shall retire, and similarly, annually, until the full Board of Directors has been elected as provided by the amended constitution.

Attention was called by President Judd to plans for future Yearbooks. The statement of these plans already circulated by mail among the active members of the Society is as follows:

#### PLANS FOR YEARBOOKS

The officers of the Society have prepared (1) a list of accepted Year-book topics, and (2) a list of other Yearbook topics under consideration. It is further planned that these lists may be extended by the addition of topics proposed by active members of the Society and also by the inclusion of Yearbook material that may have been initiated by other edu-

cational organizations which may seek alliance with this Society for the purpose of publication. This material must, of course, have the sanction of the Board of Directors, and suitable arrangements must be made for the co-operation of the Society's representatives. It is hoped that funds for subsidizing certain of the Society's undertakings may be secured in the form of subventions from various organizations that are devoted to the facilitation of research in education.

### 1. Accepted Yearbook Topics

- I. Methods of Teaching
- II. Individualized Instruction
- III. The Limitations of Training
- IV. The Technique of Curriculum Making
- V. The Education of Gifted Children (continuation of present committee)

## 2. Yearbook Topics under Consideration

- VI. Remedial Training of Speech Defectives in the Public Schools
- VII. Methods of Learning in High-School Subjects
- VIII. Elimination and Retardation (Promotion and Non-Promotion)
  - IX. The Psychology and Pedagogy of Special Abilities and Disabilities
  - X. Personnel Problems in College Administration
  - XI. The Development of Musical Appreciation in the Public School
- XII. The Non-Intellectual (Dynamic) Traits of Personality
- XIII. Studies of the Several School Subjects

Members of the Society who desire to co-operate actively in any of these undertakings are invited to notify the Secretary to that effect. Members who wish to see other topics undertaken are invited to forward to the Secretary detailed statements of such problems, including an outline of the methods by which it is proposed to attack their solution.

On motion of the Secretary, honorary membership was unanimously voted James H. Van Sickle, now of Dade City, Florida, who relinquished the superintendency of schools at Springfield, Massachusetts, August 31, 1923, and who has for many years been actively interested in the welfare of this Society and its undertakings.

On motion of the Secretary, the Society adopted by a unanimous rising vote, the following resolutions:

WHEREAS, death has removed from the National Society for the Study of Education, Stephen S. Colvin, a man who has for many years served the Society as a member of its Executive Committee, as a contributor to its Yearbooks of thoughtful and stimulating articles, and as an earnest advocate of its professional aims;

BE IT RESOLVED: That this Society, at its annual meeting held at Chicago, February 26, 1924, hereby bears witness to its deep appreciation of Professor Colvin's services to the Society, to its admiration for his rare personal qualifications as a teacher, an investigator, and a leader in educational thought, and to its sense of abiding loss which his death has brought to us, his fellow-workers.

BE IT ALSO RESOLVED: That these resolutions be entered upon the minutes of this meeting, and that a copy of them be sent to Professor Colvin's family.

On motion, the business meeting then adjourned

The third meeting of the Society, held in the Cameo Room of the Morrison Hotel, Wednesday, February 27th, at 2:15 p. m., was a joint meeting of the Society and the Department of Vocational Education and Practical Arts of the National Education Association. This meeting was devoted to a discussion of Section 2, Part II (Vocational Education for the Industries) of the Twenty-third Yearbook of the Society, prepared under the Chairmanship of A. H. Edgerton, and entitled "Vocational Guidance and Vocational Education for the Industries."

President Judd called the meeting to order and, after brief introductory remarks, turned the meeting over to the Chairmanship of Superintendent Greer.

Save for the absence of Mr. Prosser, the following program was given as scheduled:

- I. "PRESENT TRENDS AND FRIENDLY ENEMIES OF INDUSTRIAL EDUCATION."
  - A. H. Edgerton, Supervisor of Vocational Information and Guidance, Teachers College and the Lincoln School, Columbia University, New York City, New York.
- II. "Provisions for Industrial Education in the Public Schools." Howard Briggs, Director of Vocational Education, Cleveland, Ohio.
- III. "WHAT IS THE PLACE OF ANALYSIS IN VOCATIONAL CURRICULUM BUILDING?"
  - Harry D. Kitson, Professor of Psychology, Indiana University, and President of the National Vocational Guidance Association.

- IV. "How Does the Instruction in Vocational Schools Provide For Individual Differences?" Robert H. Rodgers, Bureau of Vocational Teacher Training, Milwaukee, Wisconsin.
- V. "WHAT METHODS ARE USED FOR TRAINING WORKERS IN INDUSTRY?"

  Charles Prosser, Director of William Hood Dunwoody Institute,
  Minneapolis, Minnesota.
- VI. "WHAT IS THE FUTURE OUTLOOK FOR INDUSTRIAL EDUCATION IN THE UNITED STATES?"

  K. G. Smith, State Department of Public Instruction, Lansing,

# Michigan.

- Discussion:

  J. G. Collicott, Superintendent of Schools, Columbus, Ohio.

  Erwin E. Lewis, Superintendent of Schools, Flint, Michigan.
- Dr. Snedden joined Superintendent Collicott and Superintendent Lewis in the discussion

GUY M. WHIPPLE, Secretary.

# SYNOPSIS OF THE PROCEEDINGS OF THE BOARD OF DIRECTORS

At the behest of the Board of Directors, the Secretary has prepared the following synopsis, in order that the members of the Society may be informed concerning the acts and policies of those who are directing the Society. The synopsis does not comprise all the business transacted by the Board, since numerous matters of minor importance have been omitted entirely

# FIRST MEETING OF THE BOARD (Cleveland, Ohio, April 13, 1924)

Those present were: Messrs. Judd, Koos, Lord, Rugg, Whipple. Those absent were: Messrs. Courtis, Holmes.

- (1) In connection with requests from several persons for permission to quote from the Yearbooks, but that all persons who quoted that in general there should be a liberal policy in granting permission to quote from the Yearbooks, but that all persons who quoted material should be asked to give specific reference to author, volume, date, chapter, and page, and, when the excerpts were at all lengthy, to add some statement calling the attention of the reader to the desirability of referring to the original material.
- (2) The Secretary and Dr. Judd were appointed representatives on the Council of the A. A. A. S.
- (3) A communication from Dr. Chadsey requested that the Society consider the adoption of a resolution favoring the policy on the part of school boards and superintendents of releasing teachers in service from some portion of their ordinary duties when they were engaged in professional undertakings. It was voted that the Directors recommend such a resolution for favorable action at the 1925 meeting, and Dr. Rugg was requested to draw up a resolution for presentation at that time.
- (4) A communication from the United States Commissioner of Education having requested the Society to send a representative, if possible, to the Pedagogical Congress to be held at Santiago, Chile, in the summer of 1925, it was voted that the Directors bring the attention of the Society, at its next meeting, to this Congress and

that we offer our credentials to any member that might be able to attend.

(5) The Directors authorized expenditures for 1924-25 (12 months) as follows:

Secretary's Office	\$2,250.00
Printing New Yearbooks	4,500.00
Reprinting Various Yearbooks	1,700.00
Expenses of Directors' Meetings	600.00
Expenses of Yearbook Committees	
Yearbook on Curriculum	800.00
Yearbook on Method	500.00
Yearbook on Training	700.00
Yearbook on Individual Instruction	150 00

- (6) W S Gray reported satisfactory progress on the part of his Committee on Reading and promised the completed manuscript for publication in 1925
- (7) H. O. Rugg outlined at some length his plans for a Yearbook on "The Technique of Curriculum Making" and there was general discussion concerning its contents
- (8) C. W. Washburne was asked to draw up a more extended outline of the Ycarbook which he had already sketched informally on the subject of "Individual Instruction." He was asked also to present a list of the members of the committee and urged to plan this book for printing in 1926.
- (9) The Board went on record as urging Mr. Courtis to push the work on the Yearbook dealing with "Methods" as rapidly as possible and appropriated \$500.00 towards the expenses of the committee.
- (10) L. M. Terman was asked to report as soon as possible concerning a list of members for a committee, to be headed by himself, to prepare a Yearbook on "The Limitations of Training" and a sum not to exceed \$700.00 was allowed for holding an early meeting of this committee.
- (11) The committee which had prepared the Ycarbook on "Gifted Children" under the chairmanship of G. M. Whipple, requested that the committee be continued indefinitely with the hope that after several years it might be possible to present another Yearbook supplementing the one prepared by this committee in 1924.

- (12) Charles S. Berry having reported that he found it for the present inadvisable to prepare a Yearbook on "Special Abilities and Disabilities," the Board voted that no action be taken for the present in connection with this Yearbook.
- (13) "A Report on Colleges of Liberal Arts," prepared by F. J. Kelly, which had been previously submitted for consideration as a Yearbook had since then been given publication in other journals, so this topic was stricken from the list of proposed Yearbooks.
- (14) The Yearbook on "Musical Appreciation" had been suggested by G. M. Whipple, who reported that he was not ready at present to make definite proposals, but wished the topic continued on the list of possible Yearbooks for future consideration.
- (15) Communications having been received from Ernest Burnham, Norman Frost, and Harold Van Buren concerning the desirability of a Yearbook dealing with "Rural Education," Mr. Burnham was requested to submit a more detailed account of such a Yearbook for presentation at the fall meeting of the Board.
- (16) Communications were read from John L. Horn, of Mills College, suggesting a Yearbook on "Speech Defectives." The Board felt that this topic would probably interest a comparatively small number of our readers and would, furthermore, be better undertaken by some other agency than this Society.
- (17) Communications from Earle Rugg concerning the desirability of a Yearbook dealing with "Extra-Class Activities" were read and discussed. The Directors requested L V Koos to communicate with Mr. Rugg and others and to bring to the fall meeting a possible program for this Yearbook.
- (18) The Secretary reported his correspondence with respect to Yearbooks and co-operation in their preparation had with the following persons: F. R. Pauly, L. C. Sears, P. F. Finner, W. T. Sanger, Leo Horst, A. R. Mead, Frances F. Bernard, Mary L. Patrick, E. F. Buchner, Lida B. Earhart, Agnes L. Rogers, Lucia B. Mirrielees, and Edward Rynearson.

The Board expressed its appreciation of the excellent spirit of co-operation shown by these members.

(19) On the basis of the decision made with respect to the foregoing Yearbooks, the Directors proposed that certain general prin-

ciples should be regarded as controlling the organization and operation of the *Yearbook* committees in general. These general principles included the following:

- (a) All Yearbooks must be passed upon and specifically authorized by the Board of Directors before they become official undertakings of the Society.
- (b) The chairman of each Yearbook committee, having been appointed by the Board of Directors, is expected, as soon thereafter as feasible, to propose to the Board the names of the persons whom he desires to have form the personnel of his committee, and these appointments must have the sanction of the Board to become official.
- (c) The chairman may make use of the services of other persons than the authorized committee members, both in consultation and in contributing to the Yearbook, but these additional persons are to be regarded as "associates" of the official committee, not as "members" of it.
- (d) Funds appropriated for the holding of committee meetings may be used to cover the travelling expenses of committee members, but not of associates.
- (e) The Society will not be liable for expenses incurred by committee chairmen in excess of the amounts specified for each committee by the Board of Directors.
- (f) Committee chairmen are expected to use reasonable care to arrange their committee meetings with respect to number, time, and place in such a way as to conserve the financial resources of the Society.
- (g) Each committee chairman is to present to the Board of Directors at its annual fall meeting a report of progress upon the work going on under his direction.
- (h) Every effort should be made to present at the fall meeting of the Board of Directors (to be held on or about October 1st whenever possible) as complete a formulation as possible of any Yearbook which it is proposed to publish for the meeting of the Society to be held the February following.
- (20) C. H. Judd was unanimously elected Chairman of the Board of Directors, to serve until December 31, 1924.
  - (21) C. H. Judd and H. W. Holmes were selected as the two

members to retire December 31, 1924—retiring members being, under the Constitution, eligible for re-election.

(22) The Secretary was requested to present at the fall meeting arguments for and against the continuance of the present forms of membership.

### SECOND MEETING OF THE BOARD

(Chicago, Illinois, November 8, 1924.)

Present: Messrs, Courtis, Holmes, Judd, Koos, Lord, Rugg, Whipple.

- (1) The "Announcement," as proposed for printing by the Secretary, was approved.
- (2) A request for rates for advertising space in the Yearbook was received. The Directors approved the reply which had been made by the Secretary to the effect that advertising, except for the list of the Society's own publications, was contrary to precedent and to the spirit of the Society's Yearbooks.
- (3) Correspondence was submitted between the Chairman and Secretary of the Board and officials of Section Q of the A. A. A. S. The Board endorsed the position taken by its representatives to the effect that it seemed undesirable to arrange for a formal meeting of this Society in December in affiliation with Section Q.
- (4) It was voted that the list of active members to be printed in the Yearbook should hereafter be made up of active members of the Society as of December 31st of the preceding year, rather than limit it to those who had at that time paid their dues in advance for the following year.
- (5) The Secretary and H. W. Holmes were made a committee with power to arrange a contract with the Atlantic Printing Company for the printing of the 1925 Yearbooks.
- (6) It was voted to enter on the minutes as a matter of record, the Secretary's statement concerning progress being made in developing his office to a point where it might operate independently of any connection with institutions to which he might be attached. The Secretary's report also showed that the time expended by him upon the Society's business averaged more than ten hours a week.
  - (7) It was voted that the budget for each calendar year be voted

at the fall meeting preceding that year; also that as a matter of policy, funds appropriated for a budget are to be regarded as charges against the Society—that is, as not available for any other activity than the one for which they have been appropriated.

(8) It was estimated that \$3,850.00 was already committed as possible expenditures prior to January 1, 1925, of which amount \$2,200.00 was still tied up in the form of appropriations made to Yearbook committees. In addition, the following budget was voted for 1925:

For the Secretary's Office	\$2,500.00
For Meetings of the Board of Directors	1,320.00
For Printing and Distributing Yearbooks	8,500.00
For further expenses of Yearbook Committees	850.00

- (9) It was voted not to include in the final ballot, to be mailed to the active members for the election of two members of the Board, any statements concerning the professional activities of the persons named in the ballot. It was also voted that the signatures of active members be not required in returning these ballots.
- (10) Correspondence was reported by the Secretary dealing with the protests which had been made concerning the policy of the Society in the election of its Board of Directors The Board voted unanimously that no further action need be taken concerning the matter raised in this correspondence.
- (11) On the basis of a summary of the arguments for and against continuing the present forms of membership, it was unanimously voted that no change be made in these forms, but that so far as possible the desirability of active membership be increased by offering to active members various types of service and opportunities in addition to the privileges they already enjoy.
- (12) C. W. Washburne submitted a typewritten outline of a Yearbook on "Adapting the Schools to Individual Differences." The Board authorized the publication of this Yearbook in 1925 and appropriated not to exceed \$200.00 (in place of the \$150.00 previously appropriated) for the expenses of preparing this Yearbook for publication. It was further voted that in arranging the program for this Yearbook an effort be made to secure 30 minutes of free discussion from the floor, and that a summary of the salient con-

tentions of the Yearbook he mailed in November to active members of the Society for the purpose of stimulating this discussion.

- (13) W. S. Gray submitted an outline of the Ycarbook on "Reading." It was voted that this be printed in 1925 and that a similar effort be made, as in the case of the foregoing Yearbook, to secure active discussion of its contents from the floor at the annual meeting.
- (14) H. O. Rugg reported progress made by the committee of which he is chairman, in preparation of a Yearbook on the "Technique of Curriculum Making," and similar reports were made for their respective committees by Messrs. Courtis, Terman, and Koos. (Statements concerning these Yearbooks appear elsewhere in this volume.)

The Board appropriated a sum not to exceed \$800.00 for the use of the Committee on "Extra-Class Activities" with the expectation that this Ycarbook would be ready for printing in 1927.

- (15) Correspondence was read by C. H. Judd and Miss Hoefer concerning the possibility of a Yearbook dealing with "Health Education." It was voted that in view of our present commitments and of the numerous agencies that might better undertake the assembling of material on this topic, that we should not undertake a Yearbook on "Health Education."
- (16) A proposal from Mr. Gary Myers suggesting a Yearbook on "The Prevention of Errors" was acted upon similarly to the foregoing proposal.
- (17) The Secretary suggested that a Yearbook on "Mental Hygiene and the Schools" ought to meet a ready reception, and outlined his ideas of its contents. The Secretary was requested to communicate with various persons and report at the next meeting of the Board concerning the feasibility of such a Yearbook.
- (18) It was voted that the next meeting of the Directors be held Saturday, February 1, 1925, in connection with the session of the National Education Association, and that there be a regular meeting in the fall, in October or November. The decision as to whether there should also be a meeting in May was deferred to the February meeting.
  - (19) It was voted that the Chairman of each Yearbook com-

mittee be asked to report at each fall meeting, showing the progress of his committee during the past year and citing its needs for the ensuing year.

- (20) It was voted that the clerical expenses of committees be regarded as a legitimate charge against the appropriation of these committees, in addition to the travelling expenses incurred in holding meetings of the committees.
- (21) In view of a suggestion that one of the Yearbooks be dedicated to an individual, it was unanimously voted that, as a matter of policy, the Board does not favor the adoption of this suggestion.
- (22) C. H. Judd was requested by the Board to prepare, for presentation at the February meeting, resolutions on the death of S. C. Parker, who had been prominently connected with the Society for many years.
- (23) It was voted that the selection of the presiding officers for the February meeting be left to C. H. Judd, with power.

## REPORTS ON YEARBOOKS IN PREPARATION

In order that members of the Society may be informed concerning the activities that are in progress in the preparation of forthcoming Yearbooks. the chairman of each of the committees now definitely under way has been requested by the Board of Directors to present brief reports to indicate the purpose and scope of his Yearbook, the method of procedure that is being followed, and the progress that has been made. Members of the Society are once more urged to communicate freely with these chairmen upon any of the matters here set forth, to the end of making each Yearbook a truly co-operative undertaking.

THE YEARBOOK ON "THE TECHNIQUE OF CURRICULUM-MAKING"\*

Chairman: Dr. Harold O. Rugg, The Lincoln School of Teachers College, New York City.

The committee in charge of the preparation of this Yearbook, which is expected for publication in 1926, consists of Messrs. Franklin Bobbitt, F. G. Bonser, W. W. Charters, Ernest Horn, W. H. Kilpatrick, and Harold Rugg, chairman. A meeting of some members of the committee was held in April, and of others of the committee in September, 1924.

The intention of the committee is to put forth a critical study, frankly theoretical, organized around a series of moot questions. The assembling of previous research studies on the curriculum was originally contemplated, but is now abandoned because this has now been done by the Curriculum Commission of the National Education Association. An account may, however, be included of actual curriculum-making now going on in public school systems. The introductory material will include some discussion of the strategic importance of the curriculum, an account of the scientific movement in curriculum-making and the contribution of the "freeschool" movement. The body of the Yearbook, however, will center upon the "how" of curriculum-making-how objectives shall be

<sup>\*</sup>In the absence of any statement .rom the Chairman, this account has been prepared by the Secretary on the basis of notes taken of a statement by Dr. Rugg to the Board of Directors.

determined, how materials shall be scleened, how modes of organization shall be determined, and how the grade-parcement of materials shall be determined. An annotated bibliography will be prepared.

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THE YEARBOOK ON "METHODS OF MEASURING THE EFFICIENCY OF TEACHING"

Chairman: Stuart A Courtis, School of Education, University of Michigan, Ann Arbor, Michigan

The advances made possible by the scientific study of educational problems have served to direct the attention of certain groups of educational workers to method in a new way. On the basis of certain evidence, the hypothesis has been formulated that "the value of what a child learns is determined almost completely by the way he learns it;" that is, by the method of teaching employed. The 'new' education, which throughout the world is winning advocates at an astonishingly rapid rate, is characterized by changes in classroom procedure far more radical than those in subject matter. If the claims made for the effect of method should prove to be well founded, then as revolutionary a transformation is likely to take place in education as took place when astrology changed to astronomy and alchemy to chemistry. The problem of method would, for our age, become the crucial problem in education

The committee having this Yearbook in charge proposes to determine the validity of the fundamental hypothesis quoted above. The problem resolves itself into two parts, each of which should result in a yearbook. The first need is for reliable means of determining the method of teaching being used by a teacher and the degree of skill with which it is used. The second need is for reliable means of measuring the various aspects of the effects produced and thus determining the efficiency of the teaching from the various points of view.

The law of the single variable demands that, in the final measurement of comparative efficiency, method be the only variable factor. This means that teachers using different methods must be of comparable degrees of skill in the control of their method. It means also the clear recognition of a fact, too often ignored in educational experimentation, that the product of teaching effort has many aspects and that no measurement of comparative efficiency is valid which does not include comparison of the effects produced in all the significant aspects.

Specifically, the work of the committee will consist of the following:

- 1. Determination of the significant objective characteristics of the various methods of teaching (question-and-answer method, project, problem, lecture method, etc.) and of methods of analysis, classification, and identification.
- 2. Construction of scales for the measurement of teachers' skill in the use of the various methods.
- 3. Determination of the significant products of teaching effort (as for a particular lesson in arithmetic, knowledge of how to add fractions, skill in adding fractions, initiative to use the skill in appropriate life situations, etc.).
- 4. Construction of valid tests for the measurement of each of the significant products.
- 5. Measurement of the comparative efficiency of the various methods of teaching in terms of the products determined upon.
- 6. Evaluation of results from the point of view of the determination of the contributions of method to results.

The various phases of the work of the committee differ greatly in their difficulty and in the time that will be required to complete them. The first step is comparatively simple. The second is only slightly more difficult. It is expected that these parts of the committee's work will be ready for publication in 1926. The third, fourth, and fifth steps call for the solution of many puzzling problems, and while the committee hopes to have further results to report by 1927, no definite time can be set at present for the completion of the entire labors of the committee.

All persons willing to co-operate with the committee by attempting objective definition and analysis of teaching procedure or by reporting actual observation of lessons under the conditions laid down by the committee are requested to write to the chairman, describing the type of assistance they are willing to render.

#### III

THE YEARBOOK ON THE "POSSIBILITIES AND LIMITATIONS OF TRAINING"

Chairman: Dr. Lewis M. Terman, Stanford University, California

The committee on the 1927 Yearbook, consisting of Bagley, Baldwin, Brigham, Freeman, Pintner, Whipple, and Terman (chairman), met at Chicago on November 9, 1924, and outlined its program of work. This Yearbook will be devoted entirely to investigations on the Possibilities and Limitations of Training. It is the ancient question of nature versus nurture, with special reference to their influence upon the scores earned in intelligence and achievement tests. The committee regards most of the studies which have been made in this field as ambiguous and believes that the problem should be taken up anew in investigations which would be more conclusive.

The issues involved are of such fundamental importance in education that the committee hopes it may be possible to enlist the cooperation of many investigators. The paragraphs which follow indicate types of experiments that might be expected to throw light on the problem. The list is not intended to be exhaustive. Perhaps other lines of attack, even more promising, will be found. Minor studies can be published in the Yearbook in full. More extensive investigations could be published separately in monograph or book form and be merely summarized in the Yearbook. Manuscript for the 1927 Yearbook should reach the chairman by September 1, 1926.

1. Freeman and Terman have secured a grant from the Commonwealth Fund for a co-operative study of adopted children. Freeman will compare the mental resemblance between adopted children and their true sibs with that obtaining between adopted children and their foster sibs. Terman will compare true parent-true child resemblance with foster parent-adopted child resemblance. Both Freeman and Terman will welcome the co-operation of other investigators. Terman is using only foster children who were adopted in the first year of life by persons who had no knowledge of their heredity.

- 2. Studies should be made of the effect on achievement and intelligence scores of intensive training in the school subjects or in mind-training exercises. Groups thus trained for 6 to 12 months should be compared with control groups of equal ability at the beginning.
- 3. Intelligence tests should be given to relatively uneducated groups of children and followed by re-tests of the children after they have been subjected to good educational influences. Children entering school from exceptionally ignorant homes might be given B-S tests at school entrance and again after a year of schooling. Children adopted from poor homes into good homes might be followed up and retested. In all such experiments children of foreign parentage should be excluded.
- 4. Detailed clinical studies should be made of the results of special tutoring of individual cases of low I.Q. It is, of course, important that the progress made by such cases be rigidly checked up by objective methods.
- 5. Studies should be made of the success with which children of given mental ages can be taught material commonly considered too advanced for those mental ages. Examples: reading at mental age 4, multiplication table at mental age 6, fractions at mental age 6 or 7, map reading at mental age 7, "lessons" from fables or stories at mental age 8, reversing hands of clock at mental age 9, etc. Obviously, there is room for any number of experiments in this line.
- 6. It is extremely desirable to compare the relative influence on pupils' intelligence and achievement scores of such factors as (a) teacher training, teacher expertness, teacher salary schedules, teacher experience, etc., and (b) mental age of the pupils.
- 7. Studies should be made of the relative influence of mental age and length of school attendance upon achievement as measured by reliable and valid educational tests. Among 1000 ten-year-olds (excluding children of foreign parents) the length of school attendance would probably range from a few months to 50 months. To what extent do their achievement test scores depend upon attendance and to what extent upon Binet mental age? By utilizing the method of partial correlation to render constant the factor of age, it would be feasible to use children covering a wide range of ages. It may be pointed out that in making comparisons of this kind

most of the group intelligence tests are unsatisfactory because of too close similarity to the achievement tests.

- 8. The effects of improved nutrition upon intelligence and achievement scores should be measured. Similarly, the effects of operations and corrective work with crippled or sickly children.
- 9. Conclusive investigations should be made of the extent to which such musical abilities as pitch discrimination and sense of rhythm can be improved by training. Seashore has promised a contribution in this line.
- 10. In several types of investigations of the relative influence of endowment and training it is necessary to have a quantitative rating of the cultural status of the child's home. No satisfactory rating scale for this purpose exists. It is hoped that someone will undertake to complete one before December, 1925, or at latest before September, 1926.
- 11. There is another type of investigation that would be desirable, namely, teaching various bits of skill or knowledge to children of different mental ages and noting the amount of time required to attain a given degree of mastery at each mental age. Examples: learning new names for a list of common objects, to repeat the Greek alphabet, to use the Roman numerals, to say the alphabet backwards, to extract square root or cube root, to copy a diamond or other geometrical design, to tie a bow knot, to write codes, to tell time by the clock, to grasp the solution of a puzzle when shown, etc. Such experiments, although they would not afford direct evidence on the nature-nurture problem, would throw considerable light on the extent to which mental age classifications are desirable for purposes of instruction.

In order to avoid duplication of effort, those who are willing to undertake an investigation for this Yearbook should communicate with the chairman of the committee. Among those who have already promised are Seashore, Kelley, Mrs. L. S. Hollingworth, Franzen, and Ruch. It is hoped that many others will volunteer.

## IV

## THE YEARBOOK ON "EXTRA-CLASS ACTIVITIES"

Chairman: Professor Leonard V. Koos, University of Minnesota, Minnesota.

Among the aspects of school life, especially in our secondary schools, which have come in for increasing attention in recent years, are what are commonly referred to as "extra-curricular activities," e. g., athletics, dramatics, debating, musical organizations, general organization of the pupil body, student councils, etc. In many places the amount of the pupils' time and energy devoted to them has been rapidly increasing, in some instances owing to what is intended to be constructive encouragement by teachers and school heads. In view of the dearth of materials helpful to those desirous of encouraging proper development in this field, the Society is fostering the assembly and publication, not later than 1927, of a yearbook devoted exclusively to problems falling under this main head. Those who have had opportunities to secure special information or experiences in this field should communicate with the chairman as soon after reading this announcement as possible.

# FINANCIAL REPORT OF THE SECRETARY-TREASURER OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

JANUARY 1, 1924, TO DECEMBER 31, 1924, INCL.

Balance on hand, January 1, 1924		\$10,900.35
Interest on savings account, bonds, etc.:   Interest on savings to Dec. 31, 1924\$ 30.90     Interest on registered Liberty Bond	615.74	
Towns and the second se		
Dues from Active and Associate Members	3,399.19	
Total income for the year		16,601.17
Total receipts, including initial balance		\$27.501.52
EXPENDITURES FOR 1924  Yearbooks		
Publishing and Distributing Yearbooks:		
Reprinting 1000 16th Yearbook	144.10 3,572.33 3,638.35 138.60 475.00	9,659.68
Preparation of Yearbooks:		
Expenses Committee 23rd Yearbook, Part I  Expenses Edgerton Committee 23rd Yearbook  Expenses Washburne Committee  Expenses Rugg Committee  Expenses Terman Committee	\$ 48.21 72.27 16.25 21.00 365.18	517.91
	000.10	011.01

Secretary's Office		
Secretary's salary	\$ 1,687,50	
Travelling expenses	125 88	
Ulerical assistance	241.18	
Stamps	111.00	
Stationery		
Telegrams	29.95	
SuppliesSafety Deposit Box Rent	87.31	
Safety Deposit Box Rent Miscellaneous Dues refunded, bad checks, etc.	2.00	
Dues refunded had shocks at a	14.44 5.00	
Exchange	0.00	
Exchange	149.00	
Annual banquet	58 OO	
	00.00	
Total for Secretary's Office		2,612.91
Meetings of Officers		
Executive Committee meeting .	\$ 285.68 283.88	
Board of Directors, Cleveland	283.88	
Board of Directors, Chicago	352.80	922.86
Total expenditures for 1924.		\$13,712.86
SUMMARY		
Total expenditures for 1924		\$13,712.86
Total expenditures for 1924		Ψ10,112.00
Checking account	\$ 6,228,14	
U. S. A. Treasury Certificates	800.00	
Dominion of Canada Bond (cost value)	979.75	
Continental Gas & Electric Bond (cost value)	930.00	
U. S. A. Treasury Bond	1,000.00	
Detroit-Edison Bond (cost value)	940.00	
Liberty Bonds (cost value)	1,816.97	
Liberty Bond Interest Account	899.62	<b>A</b> 40 <b>#</b> 00 <b>#</b> 5
Liberty Bond Interest Account	194.18	\$13,788.66
Total		\$27,501.52

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2. Eligibility to Membership. Any person who is interested in receiving its publications may become a member by sending to the Secretary-Treasurer information concerning name, address, and class of membership desired (see Item 4) and a check for three dollars or two dollars (see Item 5). Membership may not be had by libraries or by institutions.

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ing year are paid as indicated in Item 6.
4. Classes of Members. Application may be made for either active or associate membership. Active members pay two dollars dues annually, receive two copies of each publication, are entitled to vote, to participate in discussion, and (under certain conditions) to hold office. Associate members pay one dollar dues annually, receive one copy of each publication, may attend the meetings of the Society, but may not vote, hold office or participate in discussion. The names of active members only are printed in the Yearbook. There were in 1924 about 600 active and 1000 associate members.

Entrance Fee. New active and new associate members are required the first year to pay, in addition to the dues, an entrance fee of

one dollar.

6. Payment of Dues. Statements of dues are rendered in October or November for the following calendar year. By vote of the Society at the 1919 meeting, "any member so notified whose dues remain unpaid on January 1st, thereby loses his membership and can be reinstated only by paying the entrance fee of one dollar required of new members." School warrants and vouchers from institutions must be accompanied by definite information concerning the name and address and class of membership of the person for whom membership fee is being paid.
7. Distribution of Yearbooks to Members. The Yearbooks, ready

each February, will be mailed from the office of the publishers and only to members whose dues for that year have been paid. Members who desire Yearbooks prior to the current year must purchase them directly

from the publishers (see Item 8).

8. Commercial Sales. The distribution of all Yearbooks prior to the current year, and also of those of the current year not regularly mailed to members in exchange for their dues, is in the hands of the publishers, not of the secretary. For such commercial sales, communicate directly with the Public School Publishing Company, Bloomington, Illinois, who will gladly send a price list covering all the publications of this Society and of its predecessor, the National Herbart Society.

9. Yearbooks. The Yearbooks are issued in parts (usually two) every February. They comprise from 250 to 700 pages annually. Unusual effort has been made to make them, on the one hand, of immediate practical value, and on the other hand, representative of sound scholarship and scientific investigation. Many of them are the fruit of

co-operative work by committees of the Society.

10. Meetings. The annual meetings, at which the Yearbooks are discussed, are held in February at the same time and place as the meeting of the Department of Superintendence of the National Education Asso-

ciation.

Applications for membership will be handled promptly at any time on receipt of name and address, together with check for the appropriate amount (\$3.00 for new active membership, \$2.00 for new associate membership). Applications received up to November 30th entitle the new member to the Yearbooks for that year; those received in December are regarded as pertaining to the next calendar year.

GUY M. WHIPPLE, Secretary-Treasurer.

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(now THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION)

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